

20010327.qrp v02_n140.qrl.20010327

Date: Tue, 27 Mar 2001 19:03:13 EST

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2140

QRP-L Digest 2140

Topics covered in this issue include:

- 1) [95021] Re: X-ray machines...
by Paul Dryer <psdryer@ticnet.com>
- 2) [95022] Re: Gound mounted Vert. question
by Dave Sjolin <sjolin@swbell.net>
- 3) [95023] RE: airport xrays
by "Brian B. Riley, N1BQ" <n1bq@wulfdn.org>
- 4) [95024] Re: Gound mounted Vert. question
by david gauding <david.gauding@bbs.galilei.com>
- 5) [95025] Re: Gound mounted Vert. question
by Steve Yates - AA5TB <aa5tb@arrl.net>
- 6) [95026] Re: Gound mounted Vert. question
by "Phil (VA3UX)" <phil@vaxxine.com>
- 7) [95027] Re: X-ray machines...
by Bruce Muscolino <w6toy@erols.com>
- 8) [95028] Re: Gound mounted Vert. question
by Bill Stietenroth <k5zty@juno.com>
- 9) [95029] Explanation of "Optimum" Buried Radial Length Calculations
(still long)
by "James R. Duffey" <jamesd1@flash.net>
- 10) [95030] VERY HIGH SOLAR FLUX!
by "Paul Harden, NA5N" <na5n@rt66.com>
- 11) [95031] Note on the 10, 12, and 15 meter bands
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>
- 12) [95032] Re: Note on the 10, 12, and 15 meter bands
by Jeff Stai WK6I <jstai@home.com>
- 13) [95033] K1 and a 9 Volt Battery
by Larry Cahoon <lejek@erols.com>
- 14) [95034] Re: Tucson, AZ QRP'ers?
by Lee Hopper <leehop@qwest.net>
- 15) [95035] QRP Fun at the Raleigh Hamfest
by Paul Stroud <aa4xx@ipass.net>
- 16) [95036] Atlanticon speaker this weekend: "Rich Arland, K7SZ"
by "George Heron N2APB" <n2apb@erols.com>
- 17) [95037] Atlanticon's official Agenda & downloadable flier
by "George Heron N2APB" <n2apb@erols.com>
- 18) [95038] Re: Gound mounted Vert. question
by Robert Perkins <rperkins@gte.net>

- 19) [95039] One more small Atlanticon beacon enhancement
by "Joe Everhart" <n2cx@voicenet.com>
- 20) [95040] qrp group illinois
by "anon.ham" <anonham2001@yahoo.com>
- 21) [95041] Needed: Bearing for rotating mast
by KB7WW Art Moe <kb7ww@chatusa.com>
- 22) [95042] Re: Tucson, AZ QRP'ers?
by Bob Nielsen <nielsen@oz.net>
- 23) [95043] QRP HB Sprint - WQ2RP
by Ken Newman <N2CQ@citnet.com>
- 24) [95044] Gerry Elam??
by "John Moriarity" <k6qq@hdo.net>
- 25) [95045] Re: OT: Learning DSP
by "Leon Heller" <leon_heller@hotmail.com>
- 26) [95046] Re: Gound mounted Vert. question
by "Winston F. Jones" <winjones@ix.netcom.com>
- 27) [95047] Re X-Ray Damage
by Joseph Mikuckis <k3chp@erols.com>
- 28) [95048] Re: Buried radials?
by Bill Coleman <aa4lr@arrl.net>
- 29) [95049] WWV Use (fwd)
by "Karl F. Larsen" <k5di@zianet.com>
- 30) [95050] Re: Gound mounted Vert. question
by Bill Coleman <aa4lr@arrl.net>
- 31) [95051] Re: Learning DSP
by "David Porter" <aa3ur@home.com>
- 32) [95052] RE: airport xrays
by Larry East <w1hue@amsat.org>
- 33) [95053] TMPS: Great DX QSO
by "Franco, Nicholas J" <franco@bnl.gov>
- 34) [95054] Re: Gound mounted Vert. question
by Dave Sjolin <sjolin@swbell.net>
- 35) [95055] RE: airport xrays
by "AI2Q Alex" <ai2q@adelphia.net>
- 36) [95056] Re: Explanation of "Optimum" Buried Radial Length Calculations
(still long)
by Bill Coleman <aa4lr@arrl.net>
- 37) [95057] April QQ Udate & Warm Weather Adventures
by "Craig W. Behrens" <craigwb@hiwaay.net>
- 38) [95058] Re: OT: Learning DSP
by "Neil" <neil@aade.com>
- 39) [95059] working split with an SST
by Jim Cluett <w1pid@yahoo.com>
- 40) [95060] Re: Gound mounted Vert. question
by Pete Burbank <plburbank@kih.net>
- 41) [95061] Re: Airport Security and Ham Gear
by "Marty N5NW" <n5nw@onebox.com>
- 42) [95062] Re: Contest Logging, one more time, with a twist

- by "Marty N5NW" <n5nw@onebox.com>
- 43) [95063] Re: Airport Security and Ham Gear
by Michael Neverdosky <mneverdosky@earthlink.net>
- 44) [95064] Re: Contest Logging, one more time, with a twist
by Garie Halstead <k8kfj@ntelos.net>
- 45) [95065] FS: Ten-Tec Scout 555
by "Pastor-KC1DI" <elbc@pivot.net>
- 46) [95066] ***SMALL*** PWR/SWR Meter...?
by =?ISO-8859-1?Q?"KB=D8VCC"?= <kb0vcc@yahoo.com>
- 47) [95067] Re: Contest Logging, one more time, with a twist
by Curt Milton <wb8yyy@yahoo.com>
- 48) [95068] Re: Gound mounted Vert. question
by Sam Smith <sam.smith@ece.gatech.edu>
- 49) [95069] Re: Gound mounted Vert. question
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>
- 50) [95070] 80M QSO Wanted
by "Mugleston, Brad" <brad.mugleston@gwl.com>
- 51) [95071] tn timer S-120
by "T.W." <wb5qyt@abq.com>
- 52) [95072] 14avq manual found
by "T.W." <wb5qyt@abq.com>
- 53) [95073] Re: OT: Learning DSP
by "laura halliday" <marsgal42@hotmail.com>
- 54) [95074] WPX test!!!
by "George Osier" <gosier@twcnny.rr.com>
- 55) [95075] More HB Pics
by "Brad Hernlem" <alihernlem@hotmail.com>
- 56) [95076] Manhattan punch!!
by "Brian" <bmurrey@amexol.net>
- 57) [95077] Question: Part Substitution in Iowa 10 QRP Rig
by "Phinizy, William" <wphinizy@filenet.com>
- 58) [95078] test disregard
by paul taylor <ptay1@bestweb.net>
- 59) [95079] RE: and more information ...DO NOT!!!!!! Recharging Alkaline
by "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
- 60) [95080] Re: Airport Security and Ham Gear
by alan.kaul@att.net
- 61) [95081] RE: Battery Suggestions: Recharging Alkaline
by "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
- 62) [95082] manhattan style
by "Neil" <neil@aade.com>
- 63) [95083] [TMPS/MH101] Down to the wire for Atlanticon
by "Chuck Adams, K7Q0" <k7qo@earthlink.net>
- 64) [95084] Re: Manhattan punch!!
by Stephen M Smith <sigcom@juno.com>
- 65) [95085] Re: Question: Part Substitution in Iowa 10 QRP Rig
by "Paul Harden, NA5N" <na5n@rt66.com>
- 66) [95086] Fox: Announcing the XTREME FOXHUNT!

by Mike Gipe <mgipe@reliablemeters.com>
67) [95087] Re: Fox: Announcing the XTREME FOXHUNT!
by "Tom Dufresne" <tdufres@hotmail.com>
68) [95088] Re: Fox: Announcing the XTREME FOXHUNT!
by "Ham" <k1vp@grizzly.com>
69) [95089] Harbor Freight free shipping coupon
by "Mike WA8BXN" <hubby2k@hotmail.com>
70) [95090] Re: Harbor Freight free shipping coupon
by "David Porter" <aa3ur@home.com>
71) [95091] Re: MOBILE ANTENNA QUESTION:LONG
by "Jay Bromley" <w5jay@alltel.net>
72) [95092] Re: Harbor Freight free shipping coupon
by "David Porter" <aa3ur@home.com>
73) [95093] Re: Fox: Announcing the XTREME FOXHUNT!
by Dave Sjolin <sjolin@swbell.net>
74) [95094] FOX: "Novice Foxes" ?
by "Marshall Emm" <mgemm@mtechnologies.com>

Date: Mon, 26 Mar 2001 18:03:37 -0600
From: Paul Dryer <psdryer@ticnet.com>
To: mugglesto@ecentral.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [95021] Re: X-ray machines...
Message-ID: <3ABFD8D8.759C6D8A@ticnet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Yup....thats what happens when bags jam the scanners and one lucky bag gets
toasted for several seconds. Fast film will fog. Been there.
Paul

mugglesto@ecentral.com wrote:

> I use to work at a place that did photo development. Had a customer
> come in with about 30 rolls of film he had shot in Europe. He kept them
> in order in the bottom of his suit case.
>
> On development the negatives on the left side of his suit case were black
> and they went from that to light grey on the last roll of film. The only
> thing we could figure was some where along his flight home a scanner was
> out of wack and did an end shot of his suit case with an over dosage of
> radiation.
>
> The units in the US may be regulated but checked baggage and overseas is
> in question.

>
> de KI00T, Brad
>
> On Sun, 25 Mar 2001, Bruce Muscolino wrote:
>
> > Rich,
> >
> > Most airport scanners will not hurt your film. Take it from a traveling
> > pro. I used to ask for hand inspection but eventually they told me they
> > wouldn't do that anymore. I had to take my chances! I have never had a
> > roll of film damaged in the last 30 years!
> >
> > 73
> >

Date: Mon, 26 Mar 2001 17:52:59 -0600
From: Dave Sjolín <sjolin@swbell.net>
To: Drbob92031@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [95022] Re: Gound mounted Vert. question
Message-ID: <3ABFD65B.D3E0892C@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Drbob92031@aol.com wrote:

> If the radials are laid on the ground do they have to be any specific length
> or can all the radials for 20/15/10 be cut to $0.5w_l$ for 20M and then lay them
> on the ground.

If they are on the ground, they can be any length. Why not just cut them
to 12-16 feet in length. $0.5 w_l$ that you suggested would be 32 or so
feet which is way more than you need.

> How far apart or how close can they lie to each other to be effective?

Say you have four radials, just lay them out equi-distant a part. Run
one north, one south, one east, one west relatively speaking. try to
keep the same distance between radials but if you cant dont worry about
it.

73 de Dave, N0IT

Date: Mon, 26 Mar 2001 18:34:54 -0500
From: "Brian B. Riley, N1BQ" <n1bq@wulfden.org>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95023] RE: airport xrays
Message-ID: <LPBBJAGIPFHKPJENAKLOKELIECAA.n1bq@wulfden.org>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> -----Original Message-----
> From: Stuart Rohre
> Sent: Monday, March 26, 2001 18:22 PM

[snip]

> Anyway, if you sent the thing thru the X ray inside a bag, or
> carryon sack, it might invoke them asking you to open it up
> anyway. I save them the excitement, and also it is good to
> carry a copy of your FCC license "just in case" they want proof
> of what it is for.

This comment is in no way aimed at Stuart ... but as I read this thread, I am increasingly feeling like I want to vomit. The Constitution I swore to uphold support and defend ... that piece of paper, the ideas, the beliefs for which I shed, tears, blood, body parts, and big chunks of my soul ... it says nothing about me having to justify carrying anything to anyone ... we all just blindly go along ... it puts me in mind of the statement by Jefferson (I think) "Those who would give up a little freedom to get a little more security deserve neither." At the rate we are going we should change that other document to read "We, the sheeple..." [stepping down off soapbox] ... and, YES, I have told it to my Congressman!

BB Riley, Lt USMC(ret) , n1bq

Date: Mon, 26 Mar 2001 18:31:21 -0600
From: david gauding <david.gauding@bbs.galilei.com>
To: qrp-1@lehigh.edu
Subject: [95024] Re: Gound mounted Vert. question
Message-ID: <5.0.2.1.0.20010326183046.0246f7f0@bbs.galilei.com>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Bob,

Here are some radial ideas that work well for me. Even though we now live in a real house portable operations with verticals are still a lot of what I enjoy in radio.

Based on several visits with KE6MC/5, a.k.a. "Dr. Megacycle", I now use 8th-wave radials under all my portable verticals. Jim Duffey suggested an even dozen as minimum based on calculations and made the case for them to justify his points. But, for convenience in the field I only use eight or nine radials depending on the antenna.

I like St. Louis Radials fabricated from flat computer cable. All seven conductors are cut to the same length. The ribbons attach to the antenna feedpoint with alligator clips. This system places a lot of wire/metal under the vertical where it can do some good. I use the same ribbon radial dimension (cut for lowest operating frequency) for all bands on the same antenna.

Since you have to disassemble the antenna after each operating session the SLR's may be a good option for you. They roll up in sets of three or four ribbons pretty quickly and store easily in a round kitchen-type rubber container. Alternatively, just gather them together like a bouquet of flowers and hold in place with a large spring clip for storage.

The radial footprint for your 10/15/20 vertical using 8.5' conductors will only be a 17' diameter circle which can be a helpful feature at times.

The 8th-wave radials work just fine here and I will continue to use them that way until something better comes along. I worked 50 countries on 40m with them earlier this winter running five watts to a St. Louis Express vertical. After three weeks or so, I'm currently at 36 countries on 20m with a St. Louis Quickie vertical running two watts. No complaints and I'm having a grand time getting to 50 worked.

Must tell you I'm not sure why 8th-wave radials work, or if they work better/worse than 4th-wave radials, or any other popular dimension for that matter. I'm just reporting my results and obvious satisfaction.

Hoping these ideas and experiences are helpful to you, Bob.

Regards,

de Dave, NF0R nf0r@slacc.com

At 05:09 PM 3/26/01 -0500, you wrote:

>To all;

>

>Antenna restrictions here so I finally made a 20/15/10 multi band ground
>mounted vertical that is portable (read removable) Now comes the question.
>Laying radials on the ground and their length. Been reading and getting
>educated and some confusion.

Date: Mon, 26 Mar 2001 18:50:32 -0600
From: Steve Yates - AA5TB <aa5tb@arrl.net>
To: qrp-l@Lehigh.EDU
Subject: [95025] Re: Gound mounted Vert. question
Message-ID: <004501c0b657\$ee718180\$20713ed8@aa5tb>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit

Bob,

For your 20/15/10m ground mounted vertical the radials do not need to be a particular length but shoot for 0.15 to 0.25 wavelengths at the lowest frequency. Quantity is more important then length. Several radials of at least 15 feet in length should work great. Try to space them equally around the vertical. Obviously, the more radials the closer they will be together.

The object is to project an RF image of the vertical when observed from various elevation angles. Try to envision a mirror below your vertical antenna. When viewed from a distance you will see the vertical and its reflection in the mirror creating a complete dipole antenna. Now if the mirror were broken into several smaller pieces the reflection wouldn't be as good. In other words, a lot of radials makes for a better "mirror". Since the lower part (highest current) of a 1/4 wavelength vertical does most of the radiating this is the section that requires the best image in the "mirror" for optimum performance, hence the need for a lot of short radials over a few long ones.

The above is a simplified idea of what really happens but with this understanding you should have good luck with your vertical.

73,

Steve Yates - AA5TB

Fort Worth, TX - EM12gs
aa5tb@arrl.net
<http://www.geocities.com/aa5tb>

Date: Mon, 26 Mar 2001 20:12:20 -0500
From: "Phil (VA3UX)" <phil@vaxxine.com>
To: qrp-l@Lehigh.EDU
Subject: [95026] Re: Gound mounted Vert. question
Message-ID: <3.0.5.32.20010326201220.007aec50@vaxxine.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

There was an excellent article in Communications Quarterly about radials for verticals. I haven't read the article in quite a while but I believe your comment about quantity versus length is correct.

I experimented a bit with verticals at my last QTH. Even just two sheets of aluminum (20 square feet each - 40 sq. feet total) right at the base of the vertical made a huge difference in the feedpoint impedance. Another ham near here used rolls of chicken wire - 6 rolls fanned out from the base of the antenna. He used a "Solder-It" kit to connect them all together and he ended up with a feed point impedance of just over 30 ohms (36 ohms is with a perfect ground plane, or 120 + radials). Before summer, he'd just roll up all the chicken wire and put it in the garage 'til fall. This was for an 80 meter vertical - too noisy to use in the summer.

Phil

At 06:50 PM 3/26/2001 -0600, you wrote:

>Bob,
>

>For your 20/15/10m ground mounted vertical the radials do not need to be a
>particular length but shoot for 0.15 to 0.25 wavelengths at the lowest
>frequency. Quantity is more important then length. Several radials of at
>least 15 feet in length should work great. Try to space them equally around
>the vertical. Obviously, the more radials the closer they will be together.
>

>The object is to project an RF image of the vertical when observed from
>various elevation angles. Try to envision a mirror below your vertical
>antenna. When viewed from a distance you will see the vertical and its
>reflection in the mirror creating a complete dipole antenna. Now if the
>mirror were broken into several smaller pieces the reflection wouldn't be as
>good. In other words, a lot of radials makes for a better "mirror". Since
>the lower part (highest current) of a 1/4 wavelength vertical does most of
>the radiating this is the section that requires the best image in the

>"mirror" for optimum performance, hence the need for a lot of short radials
>over a few long ones.

>

>The above is a simplified idea of what really happens but with this
>understanding you should have good luck with your vertical.

>

>73,

>Steve Yates - AA5TB

>Fort Worth, TX - EM12gs

>aa5tb@arrl.net

><http://www.geocities.com/aa5tb>

>

>

>

Date: Mon, 26 Mar 2001 20:29:36 -0500

From: Bruce Muscolino <w6toy@erols.com>

To: mugglesto@ecentral.com

Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [95027] Re: X-ray machines...

Message-ID: <3ABFED00.35B5C943@erols.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Brad,

There is a difference between the X-Ray machines used to scan carry on
baggage and those used to scan checked baggage. Pros know the
difference and carry on all their film I have never had a roll messed
up by a carry on machine. I have had one damaged by checked baggage
machines.

73

Date: Mon, 26 Mar 2001 19:34:24 -0600

From: Bill Stietenroth <k5zty@juno.com>

To: Drbob92031@aol.com

Cc: qrp-l@Lehigh.EDU

Subject: [95028] Re: Gound mounted Vert. question

Message-ID: <20010326.194050.-3872617.3.k5zty@juno.com>

MIME-Version: 1.0

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

Bob,

I have a portable all band verticle with portable radials. I roll them up on a spool when I am through with them. Use a minimum of 12 radials, I have 16 just because I had the wire to make that many. Make them as long as the antenna is tall. I cut wires twice as long as the antenna is tall and stripped the insulation at the mid point and wrapped a piece of strap braid around them at that point and soldered the whole mess together at the mid point. To use them I fan them out around the base of the vertical and have one connection to make connect the antenna to the short piece of braid. When I am through I gather the radials ends together at one end and roll them up on the reel. It is a pretty good compromise for a portable or temporary antenna.

Bill, K5ZTY
Houston, TX

Date: Mon, 26 Mar 2001 18:41:26 -0700
From: "James R. Duffey" <jamesd1@flash.net>
To: Bill Coleman <aa4lr@arrl.net>, qrp-1 <qrp-1@lehigh.edu>
Subject: [95029] Explanation of "Optimum" Buried Radial Length Calculations
(still long)
Message-ID: <B6E53DD6.7ADD%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Bill - Thanks for your comments on my optimum radial length calculations. I am sorry I didn't take time to detail all my calculations, but the post was getting too long. I thought I had put in enough detail for someone to reproduce the calculations, at least roughly, but I guess I was wrong. Sorry. You made the comment:

"I don't know how you arrived at the numbers for this chart."

I did include a comment:

"I did the above calculations based on the 0.02 wavelength separation between radial ends."

If I take your suggestion;

"So, if you run a computation, you'll find that for a .2 w_l radial length, you have a $.4\pi w_l$ circumference, which you then divide by .025 or .05 to get 25-50 radials."

If I divide $0.4\pi w_l$ by 0.2 wavelengths(w_l), then I get 63.8 radials. I didn't do this, so I got 62, which I will explain below.

I used 0.2 wavelengths for the radial separation for several reasons. I think it is a representative value for below average soils, and I chose this as a conservative approach. I respect and value Tom, W8JI's opinions, and he is a valuable resource. Although he usually suggests the 0.25 to 0.5 wavelength radial separation he also has, on occasion suggested that a range of 0.01 to 0.05 wavelengths is also applicable, with the lower numbers being more applicable to poorer soils.

I initially approached the problem like you did, assuming that the perimeter of the radial system was a circle. When I ran into problems at short radial lengths, I did an exact calculation. Approximating the perimeter by a circle over estimates the circumference of the polygon by a bit. This does not make much difference when the number of radials is large. Hence your 62.8 vs. my 62 (probably rounded down though)

The total length of wire required, L , is given by $L = nr$, where r is the radial length.

Adjacent radials form an isosceles triangle with sides L and a base equal to the radial separation. The included angle formed by the equal sides is $360/n$. If I use perpendicular bisector to make a right triangle out of the isosceles triangle, then $\sin(360/2n) = (s/2)/r$, where s is the separation between radials. The opposite side is $s/2$ and the hypotenuse is r .

$$r = (s/2) / \sin(360/2n) \text{ and } L = nr = n * (0.01w_l) / \sin(360/2n)$$

I used MathPad, a powerful, free computational mathematics program for the Mac, to calculate L as a function of n . I then calculated r from N and L .

I actually did parametric calculations with radial separations that varied from 0.01 to 0.05 wavelengths. The 0.02 separation matched the handbook data from Stanley best, at least at long radial lengths. The lower value seemed to fit a conservative approach, particularly for a portable antenna that would be used over unknown soils.

I would like to expand on your comment:

"You get little benefit from radials substantially shorter than .2 w_l , and there's little reason to go beyond .25 w_l ."

I basically agree with this. However, I think that the biggest advantage is

obtained by going from no radials to a radial based ground system. However good data for no radials is hard to come by. I will work on that next.

None the less, 0.2 wavelength radials are probably the best length to use for the typical amateur. The exact number should be determined by the quality of the soil where you are erecting the antenna.

I suspect that your 48 radial 0.22 wavelength radial ground system will perform great without a significant cost impact. Let us know how it turns out.

Again sorry for the confusion. I think we are in violent agreement, at least to the accuracy of my calculations. - Dr. Megacycle KK6MC/5

--

James R. Duffey KK6MC/5
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Mon, 26 Mar 2001 18:49:54 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-canada@lists.gpfn.sk.ca, qrp-l@lehigh.edu
Cc: g-qrp@onelist.com, "Prof. Arnaldo Coro Antich" <inforhc@ip.etecsa.cu>
Subject: [95030] VERY HIGH SOLAR FLUX!
Message-ID: <Pine.SUN.4.10.10103261836030.29852-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

As I posted last week, we have passed the peak of the solar maximum, and after a 3 month period of virtually flat solar flux, we are again seeing the 28-day fluctuations of solar activity. As the sun begins producing flares again, we can expect days of very high solar flux.

We have seen several small M-class flares past few days, which has elevated the solar flux to 264 today. With more flares likely tomorrow, this solar flux could rise even more.

THIS IS THE HIGHEST SOLAR FLUX YET SEEN THIS SOLAR CYCLE!

According to my daily records, the two highest solar fluxes, other than today, were:

17 MAY 2000 solar flux 262 (following 5 days of M-class flares)

20 JUL 2000 solar flux 253 (following the X6 flare on the 14th and days of M-class flares thereafter)

Definitely a good time for some unique 10M DX propagation and possible 6M openings. And, a good time to take advantage of the extra ionization at sundown for some interesting gray-line propagation and unusual after dark skip.

72, Paul NA5N

PS - Worked several QRP stations on 10M sunday afternoon. Not many signals, but quiet and 559 virtually no matter who was on. Even the ZL1 I worked, both running QRP.

Date: Mon, 26 Mar 2001 20:30:20 +0100
From: "Chuck Adams, K7QO" <k7qo@earthlink.net>
To: qrp-l@Lehigh.EDU
Subject: [95031] Note on the 10, 12, and 15 meter bands
Message-ID: <5.0.2.1.0.20010326202811.00a0fb20@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

I just checked out

<http://www.dx1c.com/solar/>

and see that the Solar Flux is over 220 and the spot count is at 270 and climbing, so the bands should be pretty good. A-index at 15 or so and headed down.

FYI

Chuck Adams, K7QO
Prescott, AZ

CP-60
k7qo@earthlink.net <http://www.qsl.net/k7qo> <http://>

moon.pr.erau.edu/~adamsc

TMPS-2001 Mar 15, 2001 Q's = 380 States = 47 Counties = 316 DXCC = 12
SWL-30 with CMOS 3 keyer and HB Iambic Paddle 0.500W and vee-beam

States Needed AK DE VA

DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6

Date: Mon, 26 Mar 2001 18:24:34 -0800
From: Jeff Stai WK6I <jstai@home.com>
To: k7qo@earthlink.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [95032] Re: Note on the 10, 12, and 15 meter bands
Message-ID: <3ABFF9E2.22FB47CD@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

SIX METERS!! SIX METERS!!

Really, 5 watts, 3 elements on a 20 foot pole, and a lot of patience, and you are in business!

Just need 9 more states and 79 countries...;-)

see ya there! - jeff wk6i

"Chuck Adams, K7Q0" wrote:

>
> Gang,
>
> I just checked out
>
> <http://www.dxlc.com/solar/>
>
> and see that the Solar Flux is over 220 and the spot count is at
> 270 and climbing, so the bands should be pretty good. A-index at
> 15 or so and headed down.
>
> FYI
>
> Chuck Adams, K7Q0 CP-60
> Prescott, AZ k7qo@earthlink.net <http://www.qsl.net/k7qo> <http://>

moon.pr.erau.edu/~adamsc

>

> TMPS-2001 Mar 15, 2001 Q's = 380 States = 47 Counties = 316 DXCC = 12

> SWL-30 with CMOS 3 keyer and HB Iambic Paddle 0.500W and vee-beam

>

> States Needed AK DE VA

>

> DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6

--

jeff stai

radio stuff: WK6I in DM13

rocket stuff: NAR #21059 TRA #3356 Level 2 Cert.

email: jstai@home.com or wk6i@arrl.net

ROC web page: <http://www.rocstock.org/>

LDRS web page: <http://www.ldr20.org/>

Date: Tue, 27 Mar 2001 00:24:21 +0100

From: Larry Cahoon <lejek@erols.com>

To: qrp-l@lehigh.edu

Subject: [95033] K1 and a 9 Volt Battery

Message-ID: <5.0.2.1.0.20010327002348.00a0a9f0@pop.erols.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

The last two weeks I've been playing around with my K2 and a set of two 9 Volts NiMH batteries. Now Wayne has said the rig is good down to 8 volts. The 9 volt NiMH are rated at 8.4 volts but with a fresh charge come in closer to 9.4 volts or so.

I've set the rig a 500 mWatts, but even with that the battery is only good for about two quick QSOs before it drops to 8 volts. No rag chewing on these batteries!

So far I've managed to pick up 19 states with this setup - including four last night in the sprint. So if you have looked at the picture at the Elecraft web site and wondered if you really could run the K1 with noting more than a 9 volt battery, I can tell you it can be done.

If you want to check out the contacts they are posted at my web site. Or you can go direct to the page at <http://www.erols.com/lejek/qrp/k19volt.htm>
73 de Larry.....WD3P in MD <http://www.qsl.net/wd3p>

Date: Mon, 26 Mar 2001 18:38:36 -0800
From: Lee Hopper <leehop@qwest.net>
To: qrp-l@Lehigh.EDU
Subject: [95034] Re: Tucson, AZ QRP'ers?
Message-ID: <3ABFFD2C.A075E433@qwest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve -

Don't know if you have interest, but TAPR is the NorCal of packet - mosey on over to <http://www.tapr.org/>

BTW, they plan to kit the W7PUA DSP-10 2-Meter Transceiver described in QST Oct/Nov 99. This is a *QRP* VHF rig!

73's

Lee Hopper, KD7CTF
Portland, OR

Date: Mon, 26 Mar 2001 21:46:07 -0500
From: Paul Stroud <aa4xx@ipass.net>
To: klqrp <Klqrp@knightlites.org>
Cc: QRP-L <QRP-L@lehigh.edu>
Subject: [95035] QRP Fun at the Raleigh Hamfest
Message-ID: <3ABFFEEF.C95A69C0@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

Please plan on joining the KnightLites QRP Group at the Raleigh, NC Hamfest on Sunday, April 8th. The doors open at 8AM. We will be sponsoring a QRP forum, and we look forward to meeting you there.

We'll have more specific hamfest news in a follow up posting next week. You may take a look at www.rars.org/hamfest for general info.

72, Paul AA4XX

Date: Mon, 26 Mar 2001 22:56:03 -0500

From: "George Heron N2APB" <n2apb@erols.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Cc: "NJQRP" <NJQRP@njqrp.org>
Subject: [95036] Atlanticon speaker this weekend: "Rich Arland, K7SZ"
Message-ID: <00d901c0b671\$dd0e5e80\$fbefea9@ghlpt4>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've had a chance to preview Rich Arland's K7SZ presentation that he's prepared for Atlanticon this coming weekend very cool! It's called:
 "Into the Bush with the Wyoming Valley QRP Commandos"

It's packed with real live examples of guys taking to the field with their QRP rigs, antennas, launchers, etc. Rich covers everything from packing it up, hauling it around, setting it up and using it effectively. There are a whole bunch of real nice photos that Rich will be sharing with the Atlanticon audience.

And I'll tell you, there's nothing better than hearing this kind of a presentation that when it's straight from the author of QST's "QRP Power" monthly column! K7SZ has been published for many years (Low Power Communications, vols 1,2 and 3), and brings to the Atlanticon speaker staff some insight that few of us will every gain on our own.

Plus ... Rich is helping out the NJQRP staff this weekend by acting as master of ceremonies for us, sharing the load I normally carry during the weekend. Thanks Rich!! (Others will thanks him too since they won't have to hear my incessant droning all weekend :-)

73, George N2APB
 n2apb@amsat.org
 Atlanticon QRP Forum details are at <http://www.njqrp.org/atlanticon/>

PS: Thanks to everyone we met up with in the NJQRP "Spring QRP Homebrewer Sprint" last night. Real fun time! Summaries soon on the website.

Date: Mon, 26 Mar 2001 23:04:58 -0500
From: "George Heron N2APB" <n2apb@erols.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Cc: "NJQRP" <NJQRP@njqrp.org>
Subject: [95037] Atlanticon's official Agenda & downloadable flier

Message-ID: <00df01c0b673\$190eaba0\$fbee9@ghlpt4>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sorry all, forgot to mention that the official Atlanticon Agenda for the weekend (speakers, events) is now up on the website. Same too for the Maps & Directions.

You can see these pages, as well as the updated list of QRPers attending the weekend, at the links at the top of the page of the Atlanticon home page:
<http://www.njqrp.org/atlanticon/>

PLUS ... we've created a downloadable PDF sheet containing a colorful collection of everything on one page! Maps, agenda, event description, hotel contact information, etc. This will be a great, concise aid for anyone attending the QRP festivities this coming weekend.

Right-click on this link <http://www.njqrp.org/atlanticon/atlanticon.pdf> and "Save target as ..." to your computer. The print it out on your color ink jet printer (or B&W will do too), and you'll have your handy-dandy guide for the QRP weekend.

73, George N2APB
n2apb@amsat.org
for the NJQRP Club at <http://www.njqrp.org>

Date: Mon, 26 Mar 2001 22:05:22 -0600
From: Robert Perkins <rperkins@gte.net>
To: qrp-l@Lehigh.EDU
Subject: [95038] Re: Gound mounted Vert. question
Message-ID: <3.0.5.32.20010326220522.0088c100@mail.gte.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I got one of Vern Wright's portable antennas. It was supplied with four radials made of flat computer cable. Using my MFJ analyser, I get decent SWR on the lower end of 40 meters. All higher bands got much worse SWR when the antenna is adjusted to resonance. The supplied radials were about 1/8 wavelength at 40 meters. None of the answers I memorized on the way to becoming a 5wpm extra really explained this. So I think more radials might be better. A junkbox survey yielded a bunch of twist and flat cables which I seperated into 6 to 8 pairs shorted together at both ends. Roughly the

same length and twice as many radials - about the same results. Noting that people get better results than that with mobile antennas, I spied a piece of my neighbors barn roof, left in my yard after a serious storm. The tin was about a foot wide by 5 long. Added it to the other radials, I can now tune reasonably on all the bands. My conclusion is that the wires laying on the uncut grass were not really coupling to ground. I'm still looking for some understanding why radials that must have been functioning as elevated radials worked best at 1/8 wavelength. I would have expected improved performance at frequencies where the radials were 1/4 wave.

I am not questioning Steve's answers, by the way, I think I shall scalp the area with a weed eater and stake my radials down with pieces of coat hanger to see if that changes anything.

Robert K5IAA

At 06:50 PM 3/26/2001 -0600, Steve Yates - AA5TB wrote:

>Bob,

>

>For your 20/15/10m ground mounted vertical the radials do not need to be a
>particular length but shoot for 0.15 to 0.25 wavelengths at the lowest
>frequency. Quantity is more important then length. Several radials of at
>least 15 feet in length should work great. Try to space them equally around
>the vertical. Obviously, the more radials the closer they will be together.

>

>

>(snip)

Date: Mon, 26 Mar 2001 23:20:46 -0500

From: "Joe Everhart" <n2cx@voicenet.com>

To: "njqrp" <njqrp@njqrp.org>

Cc: "qrpl" <qrpl@lehigh.edu>

Subject: [95039] One more small Atlanticon beacon enhancement

Message-ID: <002801c0b675\$4cc6cde0\$ea5947d1@n2cxtoy>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Gang,

There is yet another small tweak for the beacon kit that can add to its output level. While adding an external amp is not within the guidelines, you *can* make the most of what you have.

As Allan Owen pointed out the other day, you may want to beef up your battery pack. We *do* want you to stay with no more than a 9-volt source so that you don't have an unfair advantage, you can certainly use a higher current source than a common alkaline battery. Also as Allan mentioned you can use multiple batteries. I don't recommend directly paralleling them. Just use a power schottky diode in series with each to prevent unwanted interaction. A mil device used for covert surveillance with which I am familiar does exactly this.

Ok, so you may want more current for your microcontroller but that does not give you a stronger audio signal. What you *can* do is to reduce or eliminate R2, the 10 ohm resistor that supplies supply voltage to U2, the audio power amp. Think about it. If you have a 10 ohm resistor in series with the chip, and an 8 or even 3 ohm speaker, you can't supply full voltage to the speaker. If you decrease the series resistance you may be able to drive the speaker harder.

However the resistor and the associated 47 uF bypass cap do decouple the output amp from the power source. Simply reducing the resistance might affect the voltage to the microcontroller or you may end up with a power amp that oscillates. Surely the bypass cap C8 may need to be increased. As with other facets of the circuit, the beacon is fully functional as supplied, but if you are willing to experiment and make sure that you don't have unwanted effects, you can certainly enhance its operation.

See you all at Atlanticon

Joe E.

Date: Mon, 26 Mar 2001 20:31:05 -0800 (PST)
From: "anon.ham" <anonham2001@yahoo.com>
To: qrp-l@Lehigh.EDU
Subject: [95040] qrp group illinois

Message-ID: <20010327043105.22823.qmail@web12707.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

are there any qrp groups in illinois? or hf pack
groups?

tia

Do You Yahoo!?
Get email at your own domain with Yahoo! Mail.
<http://personal.mail.yahoo.com/?refer=text>

Date: Tue, 25 Mar 2008 20:31:24 -0800
From: KB7WW Art Moe <kb7ww@chatusa.com>
To: qrp <qrp-l@lehigh.edu>, Ant <antennas@qth.net>, Tower
<towerstalk@contesting.com>
Subject: [95041] Needed: Bearing for rotating mast
Message-ID: <47E9D19C.78CB655C@chatusa.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am in need of rotating guy bearings for a light duty 2.00 inch mast. Can
anyone suggest a source.

Thanks
Art
KB7WW

Date: Mon, 26 Mar 2001 20:36:02 -0800
From: Bob Nielsen <nielsen@oz.net>
To: qrp-l@lehigh.edu
Subject: [95042] Re: Tucson, AZ QRP'ers?
Message-ID: <20010326203601.A3153@oz.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Mon, Mar 26, 2001 at 06:38:36PM -0800, Lee Hopper wrote:
> Steve -

>
> Don't know if you have interest, but TAPR is the NorCal of packet - mosey on
> over to <http://www.tapr.org/>

All that is left of TAPR in Tucson is a mail forwarder who sends all
received mail to the TAPR office in Denton, TX.

Well, almost--TAPR president N8UR travels there occasionally to visit
his mother.

Bob Nielsen, N7XY
past-president, TAPR

Date: Mon, 26 Mar 2001 23:59:33 -0500
From: Ken Newman <N2CQ@citnet.com>
To: epaqrp-l@lehigh.edu, QRP-L@lehigh.edu, njqrp@njqrp.org, elecraft@qth.net
Subject: [95043] QRP HB Sprint - WQ2RP
Message-ID: <3.0.6.32.20010326235933.00896b80@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

2001 Spring QRP Homebrewer Sprint

Call used: WQ2RP Location: NJ

Category: Single Op All Band Mode: CW only Power: 5W

Callsign of Operator: N2CQ

Exchanged Information: WQ2RP RST NJ 5W

Hours of Operation: 03:59

band	QSOs	points	mults
160	0	0	0
80	10	20	9
40	42	168	27
20	45	180	25
15	3	6	3
10	0	0	0
TOTAL	100	374	64

SCORE: pts 374 x mlts 64 x pwr 7 = 167,552 (Check log only).

Club or Team Name: NJ QRP Club

Comments: Many thanks for the excellent support for the Sprint
from you all.
The logs will be most needed for the available prizes
by April 26.
Great to QSO all those Milliwatters with HB gear. Hope
you all enjoyed it as I did.

Equipment: K-1 40/20. Knwd TS850 80/15. Center fed Zepp. TA33jr
Tribander

Name: Ken Newman Call: N2CQ
81 Holly Drive
Woodbury, NJ 08096

N2CQ@ARRL.NET
<http://www.NJQRP.org> for Spring QRP Homebrewer Sprint details.

Date: Mon, 26 Mar 2001 21:06:10 -0800
From: "John Moriarity" <k6qq@hdo.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95044] Gerry Elam??
Message-ID: <002a01c0b67b\$a47d94a0\$fa414cd1@k6qq>

Hey all you Arizona QRPers: Has anybody heard anything
from Gerry Elam, K7LR0. recently? I haven't seen a posting
from him in quite a while, and hope he's O.K..

72,

John, K6QQ
Alturas, CA, at the corner of 299 & 395.

Date: Tue, 27 Mar 2001 07:36:53
From: "Leon Heller" <leon_heller@hotmail.com>
To: schoon@amgt.com, qrp-1@Lehigh.EDU
Subject: [95045] Re: OT: Learning DSP
Message-ID: <F67eyIfEFexrnw6Ycmh00017d35@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>
> My latest foray into hamdom is learning DSP. In general terms in the RF
>arena for IF and audio areas. I started collecting and reading various
>articles, etc but am still confused on a good DSP evaluation system to
>learn on. Anyone have any pointers or experiences they are willing to
>share?? FWIW, I do have a small background in assembly and C programming
>on Intel based CPUs. Where I can already tell I'm short in is the math -
>but is that a major requirement and will it hinder learning??

Motorola, ADI and TI all make cheap DSP kits, which come with development software (usually assembler). Look at the various architectures and decide which you like. I've got an ADI EZ-Kit (fixed-point 16-bit) and a TI kit (32-bit floating-point). I prefer the ADI kit, the assembly language is *much* nicer, and for most applications, fixed-point is fine. You can use a floating-point library if you really need FP. That's what I do at work, with the ADI DSP we use.

Unless you are developing your own algorithms, you don't really need to go into the details of the maths.

73, Leon

--
Leon Heller, G1HSM Tel: (work): +44 1327 357824 (home): +44 1327 359058
Email:leon_heller@hotmail.com My web page:
http://www.geocities.com/leon_heller IRISYS Ltd: <http://www.irisys.co.uk>

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Tue, 27 Mar 2001 06:38:01 -0500
From: "Winston F. Jones" <winjones@ix.netcom.com>
To: <Drbob92031@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [95046] Re: Gound mounted Vert. question
Message-ID: <005c01c0b6b2\$61ec8ba0\$913245cf@netcom.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You might try a grid of "chicken wire" or other such screen wire, laid beneath the antenna. I use this with my Butternut vertical and it works well.

73, Winston K4CWQ

----- Original Message -----

From: <Drbob92031@aol.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Monday, March 26, 2001 17:09 PM
Subject: Gound mounted Vert. question

> To all;
>
> Antenna restrictions here so I finally made a 20/15/10 multi band ground
> mounted vertical that is portable (read removable) Now comes the question.
> Laying radials on the ground and their length. Been reading and getting
> educated and some confusion.
> If the radials are laid on the ground do they have to be any specific
length
> or can all the radials for 20/15/10 be cut to 0.5λ for 20M and then lay
them
> on the ground.
> The radials and the antenna have to be removed and stored after each
> operating session.
> All of life is a compromise so some degree.
> I am aware that the more radials the better and that they should not be
too
> close to each other. How far apart?
> So I have 2 questions.
> 1; Radial length for 20/15/10 .
> 2; How far apart or how close can they lie to each other to be effective?
> Please keep any responses simple as I am not overly bright and retirement
has
> dulled any brightness I may have had.
> tnx es 72/73 de WA2EAW..Bob

Date: Mon, 26 Mar 2001 09:41:26 -0500
From: Joseph Mikuckis <k3chp@erols.com>
To: qrp-1@lehigh.edu
Subject: [95047] Re X-Ray Damage
Message-ID: <3ABF5516.1431@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My Palm Pilot PRO was definitely affected by airport security X-rays. The screen was flickering, that is, it kept coming on and off in rapid succession. Fortunately this lasted about three hours. It was probably due to a large electrostatic build-up due to ionizing radiation. After recovery (and a great relief) that baby stayed in my pocket!

Joe, K3CHP
Riverdale, MD

Date: Tue, 27 Mar 2001 08:19:24 -0500
From: Bill Coleman <aa4lr@arrl.net>
To: <Drbob92031@aol.com>, "QRP" <qrp-1@Lehigh.EDU>
Subject: [95048] Re: Buried radials?
Message-ID: <1010227081923.IAA18678@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 3/24/01 17:40, Drbob92031@aol.com at Drbob92031@aol.com wrote:

>Antenna restrictions force me to go to a vertical (multi band). I intend to
>put the radials in a slit "trench." My question is. Does it matter if the
>radials for 10;15 and 20M are all placed in the same slit trench (3" to 6"
>deep) along side each other. I think not. But want assurances.

If you have ground-mounted radials for 20m, you don't need separate radials for 15m or 10m (or anything in between). The 20m radials will act as radials for these shorter-wavelength bands.

Bill Coleman, AA4LR, PP-ASEL

Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"
-- Wilbur Wright, 1901

Date: Tue, 27 Mar 2001 06:32:26 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-1@lehigh.edu>
Subject: [95049] WWV Use (fwd)
Message-ID: <Pine.LNX.4.31.0103270628400.875-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi QRP lovers, This is a message I sent to WWV in response to their request for information. Everyone who uses WWV should send a message better than the one I sent below.

Send the e-mail to nist.radio@boulder.nist.gov and just say you use it. We all do...

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

----- Forwarded message -----

Date: Tue, 27 Mar 2001 05:55:49 -0700
From: Karl Larsen <k5di@zianet.com>
To: nist.radio@boulder.nist.gov
Subject: WWV Use

Hello Guys, I have used WWV on 5,10,15 and 20 Mhz all my life to calibrate my frequency measuring device(s), radios, and clocks. The first use was about 1948 and continues to today.

WWV is a national treasure for nerds world wide.

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Tue, 27 Mar 2001 08:19:24 -0500

From: Bill Coleman <aa4lr@arrl.net>
To: <Drbob92031@aol.com>, "QRP" <qrp-1@Lehigh.EDU>
Subject: [95050] Re: Ground mounted Vert. question
Message-ID: <1010227081924.IAB18678@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 3/26/01 17:09, Drbob92031@aol.com at Drbob92031@aol.com wrote:

>Antenna restrictions here so I finally made a 20/15/10 multi band ground
>mounted vertical that is portable (read removable) Now comes the question.
>Laying radials on the ground and their length. Been reading and getting
>educated and some confusion.

50 radials of .2 to .25 wavelength on 20m should be sufficient.

>If the radials are laid on the ground do they have to be any specific length
>or can all the radials for 20/15/10 be cut to $0.5w_l$ for 20M and then lay
>them
>on the ground.

All one length, but $.5 w_l$ is way longer than necessary.

>The radials and the antenna have to be removed and stored after each
>operating session.

Bummer. You may want to try to use fewer radials -- like about 20-25.
Should work almost as well as 50.

>I am aware that the more radials the better and that they should not be too
>close to each other. How far apart?

0.025 to $0.050 w_l$ at the ends.

>So I have 2 questions.
>1; Radial length for 20/15/10 .

$0.22 w_l$ is a good length for ground-mounted radials. For 14.1 MHz, that's
14.6 feet. Just make it 15 feet.

>2; How far apart or how close can they lie to each other to be effective?

50 evenly spaced radials pretty fairly approximates a solid metal sheet
out to $.22 w_l$.

Bill Coleman, AA4LR, PP-ASEL

Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"
-- Wilbur Wright, 1901

Date: Tue, 27 Mar 2001 08:45:53 -0500
From: "David Porter" <aa3ur@home.com>
To: <schoon@amgt.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95051] Re: Learning DSP
Message-ID: <010e01c0b6c4\$3e8f5540\$926e0941@jamison1.pa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

For a nice, cheap introduction, try this book. The entire book can be downloaded, or you can buy it.

<http://www.dspguide.com/>

David Porter
aa3ur@home.com
AA3UR

----- Original Message -----

From: <schoon@amgt.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Monday, March 26, 2001 5:06 PM
Subject: OT: Learning DSP

> Thanks for reading!!

>

> My latest foray into hamdom is learning DSP. In general terms in the RF
> arena for IF and audio areas. I started collecting and reading various
> articles, etc but am still confused on a good DSP evaluation system to
> learn on. Anyone have any pointers or experiences they are willing to
> share?? FWIW, I do have a small background in assembly and C programming
> on Intel based CPUs. Where I can already tell I'm short in is the math -
> but is that a major requirement and will it hinder learning??

>

> Thanks again & 72,

>

> .mark

>

>

> KA6WKE - <http://www.qsl.net/ka6wke>

>

> -----BEGIN GEEK CODE BLOCK-----
> Version: 3.1
> GCS/E/IT/O d- s+ a C++++\$ L++++\$> P+++> L++ E--- W-- N+ o K- w-- !O
> M- !V PS+ PE+ Y+ PGP t+ !5 X R- tv b+++ DI+ D- G e++ h--- i+++ z++++
> -----END GEEK CODE BLOCK-----
>
>
>
> Q: I'm having problems with my Windows software. Will you help me?
>
> A: Yes. Go to a DOS prompt and type "format c:". The problems you are
> experiencing will cease within a few minutes. - RMS
>
> use Disclaimer;
> my \$opinion_only;
>

Date: Mon, 26 Mar 2001 19:41:17 -0700
From: Larry East <wlhue@amsat.org>
To: <qrp-l@Lehigh.EDU>
Subject: [95052] RE: airport xrays
Message-ID: <5.0.2.1.2.20010326193739.03076960@mail.ida.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

>
>However, x-rays can harm semiconductors and components over time, and this
>is why many Oscar satellites die.

Damage to electronics in satellites is caused by high energy cosmic rays
(charged particles). Small doses of relatively low energy x-rays (as used
in baggage scanners) should have no effect.

Just one more example of well meaning but erroneous information on this list.

Date: Tue, 27 Mar 2001 09:54:45 -0500
From: "Franco, Nicholas J" <franco@bnl.gov>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [95053] TMPS: Great DX QSO
Message-ID: <D869CC4782D3D41182CB0002B30A362B80A40A@exchange01.bnl.gov>
MIME-Version: 1.0

Content-Type: text/plain;
charset="windows-1252"

Hi Gang,

Late last night I decided to make a short contact before retiring for the night. I turned on my SWL-30 (original) and listened around. A strong DX station was working someone and then called QRZ. He was DJ7PW, "Wolf" and turned out to be very friendly. We engaged in a ragchew initiated on his end. I thought since I'm QRP and it was DX that this would be a quick exchange and sign-off deal. Each time I turned it back, he had another question about my rig or antenna, etc. BTW: I worked him at 2W using my HF6V ant. We had a very enjoyable chat and he told me that I was peaking at 579 consistently during the QSO! He was running 100W to a 3el Yagi, so I didn't have any problem hearing him :-). It was a nice way to end the day.

30 meters is alive and well, and the people who hang out there are still very friendly. Get on the air and have fun.

God Bless es 73,

Nick - kf2p . . .
QRP-L # 13

--
Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
Systems Administrator Collider-Accelerator Department
Tel: (631) 344-5467 UPTON, NY 11973-5000
Fax: (631) 344-2833 Ham Call: KF2P
<mailto:nickf@bnl.gov> <http://www.rhichome.bnl.gov/People/franco>

Date: Tue, 27 Mar 2001 08:48:13 -0600
From: Dave Sjolin <sjolin@swbell.net>
To: Drbob92031@aol.com, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [95054] Re: Ground mounted Vert. question
Message-ID: <3AC0A82D.B783AE92@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Bob, attached are some additional thoughts on your vertical question.

How are you going to mount the antenna? I understand that it is a temporary setup and it will come down after each use but how are you

setting it up?

The reason I ask is depending how you do this, you may be able to bury the radials out of sight and merely connect them when you install the vertical itself to operate. If that is the case then you may be able to plant 24 or 50 radials for a really effective antenna. On the other hand four to eight radials for a temp setup is better than no antenna. My 40 meter vertical usually starts out the year with 16 radials and by the end of the season its down to six or so and it still works fine.

Also if you plan to install it to a chain link fence, the fence itself maybe enough ground system for you.

73 de Dave, N0IT

Date: Tue, 27 Mar 2001 10:08:59 -0500
From: "AI2Q Alex" <ai2q@adelphia.net>
To: <n1bq@wulfden.org>, "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [95055] RE: airport xrays
Message-ID: <000101c0b6cf\$da2ad6e0\$df0cf618@alex>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Brian, thanks for your comments. If you get a chance, spend a few hours reading "A Republic, Not An Empire: Reclaiming America's Destiny," by Patrick J. Buchanan.

Although I always thought of Buchanan as an ultra-right wing conservative reactionary, I didn't realize until I read his book what an incredibly fine historian he is, and what a terrific writer to boot. In fact, his book was a NY Times Best Seller for a long time.

If we didn't insist on a "made in the USA" global hegemony policy, it's quite possible we wouldn't be in this bind where we have to fear people carrying bombs and guns onto airplanes with the intent to hijack them in the first place.

Vy 73, AI2Q, Alex in Kennebunk, Maine QRP-L 687 .-.-.

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Brian B. Riley, N1BQ

Sent: Monday, March 26, 2001 6:35 PM
To: Low Power Amateur Radio Discussion
Subject: RE: airport xrays

> -----Original Message-----
> From: Stuart Rohre
> Sent: Monday, March 26, 2001 18:22 PM

[snip]

> Anyway, if you sent the thing thru the X ray inside a bag, or
> carryon sack, it might invoke them asking you to open it up
> anyway. I save them the excitement, and also it is good to
> carry a copy of your FCC license "just in case" they want proof
> of what it is for.

This comment is in no way aimed at Stuart ... but as I read this thread, I am increasingly feeling like I want to vomit. The Constitution I swore to uphold support and defend ... that piece of paper, the ideas, the beliefs for which I shed, tears, blood, body parts, and big chunks of my soul ... it says nothing about me having to justify carrying anything to anyone ... we all just blindly go along ... it puts me in mind of the statement by Jefferson (I think) "Those who would give up a little freedom to get a little more security deserve neither." At the rate we are going we should change that other document to read "We, the sheeple..." [stepping down off soapbox] ... and, YES, I have told it to my Congressman!

BB Riley, Lt USMC(ret) , n1bq

Date: Tue, 27 Mar 2001 10:12:19 -0500
From: Bill Coleman <aa4lr@arrl.net>
To: "James R. Duffey" <jamesd1@flash.net>, "Bill Coleman" <aa4lr@arrl.net>, "qrp-1" <qrp-1@lehigh.edu>
Subject: [95056] Re: Explanation of "Optimum" Buried Radial Length Calculations (still long)
Message-ID: <1010227101218.KAA03233@gate.iterated.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 3/26/01 8:41 PM, James R. Duffey at jamesd1@flash.net wrote:

>Bill - Thanks for your comments on my optimum radial length calculations. I
>am sorry I didn't take time to detail all my calculations, but the post was
>getting too long. I thought I had put in enough detail for someone to
>reproduce the calculations, at least roughly, but I guess I was wrong.
>Sorry. You made the comment:
>
>"I don't know how you arrived at the numbers for this chart."

I suppose my comment was directed at the 3.9 foot radials for 20m. I
don't see the utility of radials of less than about .15 wl. They're just
not effective.

>I did include a comment:
>
>"I did the above calculations based on the 0.02 wavelength separation
>between radial ends."

Seems a bit on the tight side. It only means you'll put down a bit more
wire than you probably need to.

>If I take your suggestion;
>
>"So, if you run a computation, you'll find that for a .2 wl radial length,
>you have a .4pi wl circumference, which you then divide by .025 or .05 to
>get 25-50 radials."
>
>If I divide $0.4 \times \pi \times wl$ by 0.2 wavelengths(wl), then I get 63.8 radials. I
>didn't do this, so I got 62, which I will explain below.

By my calculations, $.2 \text{ wl} \times 2\pi / 0.02 \text{ wl} = \text{about } 62.8 \text{ radials.}$

>I used 0.02 wavelengths for the radial separation for several reasons. I
>think it is a representative value for below average soils, and I chose this
>as a conservative approach. I respect and value Tom, W8JI's opinions, and he
>is a valuable resource. Although he usually suggests the 0.25 to 0.5
>wavelength radial separation he also has, on occasion suggested that a range
>of 0.01 to 0.05 wavelengths is also applicable, with the lower numbers being
>more applicable to poorer soils.

Much of this information is detailed in the ARRL handbook. You can
actually look at the curves and see how much improvement you get with
each set of radials.

>I initially approached the problem like you did, assuming that the perimeter
>of the radial system was a circle.

This works. One thing I noticed was that closer to the center, the wires
are closer together than the required 0.025 wl. This lead to the idea of

splitting or forking radials to maintain the required spacing. This ends up using a lot less wire, but has the complication of requiring lots of connections that are in contact with the ground or buried. That's why most opt for full-length radials.

>The total length of wire required, L , is given by $L = nr$, where r is the
>radial length.

>

>Adjacent radials form an isosceles triangle with sides L and a base equal to
>the radial separation.

Got it.

>I would like to expand on your comment:

>

>"You get little benefit from radials substantially shorter than $.2 \lambda$, and
>there's little reason to go beyond $.25 \lambda$."

>

>I basically agree with this. However, I think that the biggest advantage is
>obtained by going from no radials to a radial based ground system. However
>good data for no radials is hard to come by. I will work on that next.

If your antenna system needs radials, you need to install them. It won't work well without them.

One other factor for short radials -- if you install a $1/4$ wave vertical, you actually need MORE radials close to the driven element, since that is where the current is. In a typical installation, you usually get this, since the widest spacing occurs far from the element. So, at some point, you get a diminishing return for making the radials shorter -- because you can't decrease the number of radials as you get close to the radiator without incurring more loss.

>None the less, 0.2 wavelength radials are probably the best length to use
>for the typical amateur. The exact number should be determined by the
>quality of the soil where you are erecting the antenna.

>

>I suspect that your 48 radial 0.22 wavelength radial ground system will
>perform great without a significant cost impact. Let us know how it turns
>out.

I suppose it's time to start digging the hole to place the tower....

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"

-- Wilbur Wright, 1901

Date: Tue, 27 Mar 2001 09:26:59 -0600
From: "Craig W. Behrens" <craigwb@hiwaay.net>
To: "QRP-L QRP-L" <qrp-l@Lehigh.EDU>
Subject: [95057] April QQ Udate & Warm Weather Adventures
Message-ID: <LPBBIKBNB00LHAAJAHJGOEBHCHAA.craigwb@hiwaay.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

We have all froze our buns off Warmer weather is just around the corner have you started planning your next portable operation(s) yet?

The April QRP Quarterly, second issue of the special 40th Anniversary set of 4, is being printed and will soon be headed your way. Ya ll should receive your copy by mid April.

(NOTE: We only have a few of the January issues in stock they will easily be sold by Dayton time. If you want to have the full set of these collector s items get your orders in via the QRP ARCI web site. You can use PayPal to subscribe and MAKE SURE you say in the comment field that you want the January issue sent out as your first issue.)

Now the QQ staff and I are looking for new material for the July issue. A main theme for this issue will be on portable equipment, operation, events and locations all aspects of it. Example article ideas include (and are not limited to):

Your Most Fun (or memorial) Portable Experience
Favorite Locations
How to optimize Station Set-Ups (Technical Challenges)
Portable Antennas & Tuners
Power Considerations and Trade-Offs (Battery and Solar)
How to Modify your Kits/Gear to Make them More Trail Friendly
Brief Case Portable (Hotels)
Mobile and RV QRP
Maritime QRP
Island QRP
Mountain top QRP
Serious Portable QRP Contesting (Including QRPTTF and Field Day)
QRP Club Operations
Portable Operation Expectations and Goal Setting
Planning a Successful Portable Operation
Add Your Portable Operation Topic Here

In addition to article submissions, I ll be looking for lots of pictures of portable equipment and station set-ups accompanied with short descriptions. I also plan to collage short comments from e-mails that I collect together to help us share the fun everyone is having. So, PLEASE throw a copious number of goodies to this greedy Editor and/or the QQ staff.

So build and modify QRP gear, conjure up neat places to go, make plans, document your events and share it with us.

Let the warm-weather adventures begin!

72/73 & DX,
Craig W. Behrens--NM4T (QQ Editor)
Madison, AL

Date: Tue, 27 Mar 2001 07:41:22 -0800
From: "Neil" <neil@aade.com>
To: <leon_heller@hotmail.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95058] Re: OT: Learning DSP
Message-ID: <001f01c0b6d4\$60618660\$5a330918@fedwy1.wa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

You can download a book on DSP from Analog Devices at
http://www.analogdevices.com/industry/dsp/dsp_book/

Neil
<http://www.aade.com>
<mailto:neil@aade.com>
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

----- Original Message -----

From: "Leon Heller" <leon_heller@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, March 27, 2001 7:36 AM
Subject: Re: OT: Learning DSP

>

> >
> > My latest foray into hamdom is learning DSP. In general terms in the RF
> >arena for IF and audio areas. I started collecting and reading various
> >articles, etc but am still confused on a good DSP evaluation system to
> >learn on. Anyone have any pointers or experiences they are willing to
> >share?? FWIW, I do have a small background in assembly and C programming
> >on Intel based CPUs. Where I can already tell I'm short in is the math -
> >but is that a major requirement and will it hinder learning??
>
> Motorola, ADI and TI all make cheap DSP kits, which come with development
> software (usually assembler). Look at the various architectures and decide
> which you like. I've got an ADI EZ-Kit (fixed-point 16-bit) and a TI kit
> (32-bit floating-point). I prefer the ADI kit, the assembly language is
> *much* nicer, and for most applications, fixed-point is fine. You can use
> a
> floating-point library if you really need FP. That's what I do at work,
with
> the ADI DSP we use.
>
> Unless you are developing your own algorithms, you don't really need to go
> into the details of the maths.
>
> 73, Leon
>
> --
> Leon Heller, G1HSM Tel: (work): +44 1327 357824 (home): +44 1327 359058
> Email:leon_heller@hotmail.com My web page:
> http://www.geocities.com/leon_heller IRISYS Ltd: <http://www.irisys.co.uk>
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> Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.
>
>

Date: Tue, 27 Mar 2001 07:53:30 -0800 (PST)
From: Jim Cluett <w1pid@yahoo.com>
To: qrp-1@lehigh.edu
Subject: [95059] working split with an SST
Message-ID: <20010327155330.40548.qmail@web11601.mail.yahoo.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

You gotta do what you gotta do!
So when VP5/K5CM is on 30 meters
calling CQ and listening up, and you're
on an SST, you're kinda stuck.
OK - left hand on the VX0 tuning knob.
Right hand on the key. Let's see here...
about an 1/8 of a turn clockwise. Call him.
an 1/8 of a turn counterclockwise. Yes...
he's answering!!! got it, just one more
crank clockwise... send the acknowledgement.
Done! Damn! (thank goodness it wasn't outta
the 10 Khz. bandwidth...)Jim w1pid@arrl.net

Do You Yahoo!?
Get email at your own domain with Yahoo! Mail.
<http://personal.mail.yahoo.com/?refer=text>

Date: Tue, 27 Mar 2001 11:05:09 -0500
From: Pete Burbank <plburbank@kih.net>
To: sjolin@swbell.net, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95060] Re: Gound mounted Vert. question
Message-ID: <5.0.2.1.0.20010327105634.00a8e5d0@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 08:48 AM 3/27/2001 -0600, Dave Sjolin wrote:

>Also if you plan to install it to a chain link fence, the fence itself
>maybe enough ground system for you.
>
>73 de Dave, N0IT

I used a farm fence in last summers 20 M foxhunt with a 16 foot vertical
and it worked
very well. Just clean the rust off with a file and clip on with a stout clip.
73 Pete NV4V

Date: Tue, 27 Mar 2001 10:27:13 -0600
From: "Marty N5NW" <n5nw@onebox.com>

To: "QRP" <qrp-1@lehigh.edu>
Subject: [95061] Re: Airport Security and Ham Gear
Message-ID: <000301c0b6da\$c90752c0\$0200a8c0@n5nw>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Security is inconsistent by design, I suspect. Never knowing what to expect is in itself a security benefit. A designer of terrorist weapons cannot count on a consistent standard of what will be inspected and what will not. In Zurich, the security attendant refused to hand-inspect my film, and forced it through the xray. Sure, it didn't hurt, but I wasn't wanting to take the chance. I didn't know what the possibilities of replacing 15 rolls of Kodachrome slide film in Albania were!

One very important thing to consider on overseas trips with a lot of luggage are the inspection points and baggage handling options. Most domestic airports have a separate security clearance for international areas. I would have packed a little smarter with my carryon luggage, putting questionable items within easy reach for a quick turnaround.

On the return trip, I had a layover of a day or so in Zurich. The layover was long enough that the airline (Swissair) would not keep my checked baggage. So I had to schlep my checked bags to the train and through the center of Zurich to the hotel.

When I got back to the US, I entered the country at Washington (Dulles). Upon arrival, we claimed our bags and cleared customs. Every airline had a baggage check immediately on the other side of customs (about 20 yards away). Except Delta. Had to schlep the bags to the MAIN TERMINAL and recheck them on Delta, then get my wife and myself back through security for our domestic flight home. Lesson learned.

FWIW, nobody in Albania even looked at the gear ...

--

72 es 73 de Marty, N5NW

--

Lakeland (Memphis), Tennessee
<http://marty.w.tripod.com/>

Date: Tue, 27 Mar 2001 10:36:46 -0600
From: "Marty N5NW" <n5nw@onebox.com>

To: "QRP" <qrp-1@lehigh.edu>
Subject: [95062] Re: Contest Logging, one more time, with a twist
Message-ID: <000501c0b6dc\$1e20cba0\$0200a8c0@n5nw>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

TR Log allows you to input a log after the contest, and will then score it for you. I'm assuming most contest packages allow that as well.

I'm not aware of any "after the fact" only type software. I'd assume one would have to be homebrew.

--

72 es 73 de Marty, N5NW

--

Lakeland (Memphis), Tennessee
<http://marty.w.tripod.com/>

Date: Tue, 27 Mar 2001 17:01:15 +0000
From: Michael Neverdosky <mneverdosky@earthlink.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [95063] Re: Airport Security and Ham Gear
Message-ID: <3AC0810B.A69348E@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Marty N5NW wrote:

>

> Security is inconsistent by design, I suspect. Never knowing what to expect
> is in itself a security benefit.

They are terrorists and they are not stupid. It is not that hard to figure out where security is tight and where it is lax.

There is another big problem. Checked baggage.

As long as any airline can loose any piece of baggage it is not only possible but easy to get a bomb onto a plane. Well, maybe not easy but much easier than people think.

--

Michael Neverdosky N6CHV AMA 77292

Date: Tue, 27 Mar 2001 17:08:51 +0000
From: Garie Halstead <k8kfj@ntelos.net>
To: Marty N5NW <n5nw@onebox.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [95064] Re: Contest Logging, one more time, with a twist
Message-ID: <3AC082D2.89780B31@ntelos.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

On Tuesday, 27 March 2001, N5NW wrote:

> TR Log allows you to input a log after the contest, and will then score it
> for you. I'm assuming most contest packages allow that as well.

NA has the same capability Marty. Just type MANUALMODE in the callsign field and enter your contacts. To exit manual mode, type the command REALTIME in the callsign field. Both are great contest/logging programs.

73/72 //Gary *K8KFJ*
West Virginia

Date: Tue, 27 Mar 2001 12:20:41 -0500
From: "Pastor-KC1DI" <elbc@pivot.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95065] FS: Ten-Tec Scout 555
Message-ID: <002201c0b6e2\$4183e180\$b210a1d0@elbc>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I have a Ten Tec Scout 555 with all band modules & 937 power supply for sale. Asking \$450.00 Shipped CONUS. others pay actual shipping. Great little rig, Works great, appearance would say was an 8 some wear on lettering & minor marks. One modification so that power output can be adjusted from 2.5 to 50 watts. This is easily removed and returned to original if you desire. Would consider partial trade of MFJ 9030 / OHR 100A (30m) rig or similar.

Please contact me off List at elbc@pivot.net
Pictures can be emailed if desired.

73 Dave KC1DI

Date: Tue, 27 Mar 2001 09:36:42 -0800 (PST)
From: =?ISO-8859-1?Q?"KB=D8VCC"?= <kb0vcc@yahoo.com>
To: qrp-l@Lehigh.EDU
Subject: [95066] ***SMALL*** PWR/SWR Meter...?
Message-ID: <20010327173642.15244.qmail@web1201.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hi Gang,

I caught the tail end of the recent pwr/swr meter thread, but didn't see what I've been interested in for some time now. Specifically, I'm looking for a TINY, accurate QRP pwr/vswr meter. Hopefully with two ranges, 5w max deflection and 1w max deflection. I prefer two meters displaying forward and reflected power simultaneously. Here's the kicker, I'm looking for something SMALL for hiking! I'm talking something like 1" thick, 2" wide and 3" long and weighs in the 8 oz range (w/battery). Does there exist such a thing on the market either in kit or assembled form, or do I have to brew my own? This sounds like an excellent kit for some club. All those I've found in my search thus far are MUCH bigger and heavier than I described, all using extremely low-density PCB construction and huge meter movements. I would build it using very small edge-wise meter movements and keep board components as tight as physically possible. Comments? Suggestions?

Tnx es 72/73!
Dale

=====

Dale Anderson	In the Mt Washington Valley
KB0VCC	Conway, New Hampshire
QRP-L #91 / CQC #251	Grid Sq: FN43KX

ARS #234 / FISTS #3172 <http://www.qsl.net/kb0vcc>

Do You Yahoo!?
Get email at your own domain with Yahoo! Mail.
<http://personal.mail.yahoo.com/?refer=text>

Date: Tue, 27 Mar 2001 09:42:44 -0800 (PST)
From: Curt Milton <wb8yyy@yahoo.com>
To: n0rc@hotmail.com, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [95067] Re: Contest Logging, one more time, with a twist
Message-ID: <20010327174244.35533.qmail@web9613.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Been there - tried that - have not found any good solutions. I guess motivation is to submit scores via e-mail. Before Cabrillo i did it once or twice. you could enter them latter in a program, but you got to edit the data file to change the times back to the past when you made the QS0.

i don't think there is a big "market" for what you are asking for. i will dabble in contests with my paper log, but after any small effort the dupe checking capability of the PC is better than my memory. Sugest you at least give QRPDUPE a try. i have it running on a low end 486.

curt wb8yyy

--- Rod Cerkoney <n0rc@hotmail.com> wrote:
> Folks,
>
> I'm looking for a GOOD _AFTER THE FACT_ logging
> solution.
>
> I'll probably never use computer automation during
> the event. Don't
> want to, don't care to, don't talk to me about
> trying something...etc.
> I'm old fashioned about this, and not that serious
> about contesting...
> so there! ;-)
>

> But I would like a nifty way to tally up the score
> afterwards. I've
> done it in spreadsheets in the past but it does get
> tiresome. Anybody
> have a good "after the 'test" tool/solution?
>
> 73, Rod NØRC
> Ft Collins CO

Do You Yahoo!?
Get email at your own domain with Yahoo! Mail.
<http://personal.mail.yahoo.com/?refer=text>

Date: Tue, 27 Mar 2001 13:02:30 -0500
From: Sam Smith <sam.smith@ece.gatech.edu>
To: plburbank@kih.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [95068] Re: Gound mounted Vert. question
Message-ID: <3AC0D5B6.BFD5DD65@ece.gatech.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Pete Burbank wrote:

> I used a farm fence in last summers 20 M foxhunt with a 16 foot vertical
> and it worked
> very well. Just clean the rust off with a file and clip on with a stout clip.
> 73 Pete NV4V

I never thought of that. The GA DOT just put in 13 miles of fence along a new road that just happens to border my property. Only trouble is I need about 500 feet of feedline to get to it :-)

--

Sam Smith N4MAP
sam.smith@ece.gatech.edu
<http://www.mindspring.com/~sam.smith>

Date: Tue, 27 Mar 2001 13:10:22 -0500 (EST)
From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>
To: Drbob92031@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [95069] Re: Gound mounted Vert. question
Message-ID: <Pine.BSF.4.10.10103271242450.32579-1000000@quartz.gly.fsu.edu>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I've been trying to restrain myself but the burden has become too great.

Generally, I don't care too much for vertical antennas. It relates back to the 14 AVQ I had in the back yard of my parents row house in Queens during the late 60's. Seemed I could never work any DX. One of the few stations I was able to work with any regularity was Drbob on 21350 every night. At that time I had 4 (more or less depending on who was mowing the lawn) 16 foot radials. That was 30+ years ago. Now, I still talk to Drbob but we both live in FL. We talk on the internet.

I have an Icom 710 marine radio in my office. It has been known to show up on the amateur bands occassionally. My antenna can charitably be described as a whip (it is a Shakespeare 23' marine vertical chosen under orders issued by a senior manager who is not very knowledgable in radio matters..I was told to duplicate the setup on one of our boats). I also use an SGC 230 tuner (purchased at the suggestion of a Shakespeare customer support/design engineer who also happens to be a ham). The whip is on the roof of a 3 story building. My counterpoise system consists of 7 33 foot radials. The antenna is on the parapet of the building. Four of the radials are spread out on the roof, the remaining three radials are fastened to the side of the building. These 3 radials run up and down the side of the building. Also, the radiation angle was intentionally kept high as the maximum communication path was anticipated to be on the order of 500 miles (the Keys).

Most of my operation is on 20M and above. The antenna is performing better than anyone could have expected. Among the DX in the log is 7X4, VP8, 9K2, HF0, SU, XT2, 5X, 7Q7 etc etc etc.

To the casual observer, the lesson to be learned from all of this is that you don't need 20 radials to get out and you don't need 66 foot radials. Four evenly spaced 33 foot radial should do just fine. If you cant evenly space the radials, do what you can...it's not the end of the world (after all, some of my radials run down the side of the building). I think that putting out 33 foot radials will probably do more for you than even spacing. You should try to put out as many radials as possible but there is no need to get anal about it. Four should do fine.

Oh well, back to my hole.

Henry

Date: Tue, 27 Mar 2001 11:05:49 -0700
From: "Mugleston, Brad" <brad.mugleston@gwl.com>
To: qrp-l <qrp-l@lehigh.edu>, CQC <cqclist@egroups.com>
Subject: [95070] 80M QSO Wanted
Message-ID: <F9645092A142D3118CBD00805F15292E12B21F49@eb-mail1.gwl.com>
MIME-Version: 1.0
Content-Type: text/plain

Hello everyone, recently I was Elmered into building a power supply and an 80M transmitter. Big deal you say but the schematics were from 1929 and with some help from my Elmer I was able to use real time period parts (well the copper tubing coil I wound was "new" parts and some of the caps and resistors were also new - come to think about it the 1 X 6 pine board I used was also new - well I tried).

Anyway, it works. At least I believe it works. My power out meter says about 2 watts of something is going into the antenna. Elmer Rick and I have been trying to have a QSO on it but so far not luck and no one else has answered by sickly sounding CQ. So if you don't have a date this Friday and would like to listen in around 3.750 at 0200z (Saturday morning Z) sit down and give a listen. I will only be on for about 1/2 hour unless I get in a QSO.

I'm using my '27 tube Hartley as a transmitter and my TS-830S as a receiver. Have your filters on WIDE as my signal sounds like it moves around a little (it's not really drift because it goes both directions up and down, up and down more like a roller coaster). If you have a separate TX and RX that may be easier as my receive will be solid but my transmit seems to move a bit.

I'd really like to talk to Rick W9QZ my Elmer so if he and I are able to hear each other please give us some space, you may listen and try me afterwards but don't hurt your self falling off your chair listening to my CW.

If you can hear me but can't contact me I would like a report by email (or even if we do make contact). Give me some details and for those of you that know about these kinds of things any suggestions would also be appreciated. If you do send me an email you can reply to this address and if you would send a copy to my home at muglesto@ecentral.com I will get it over the weekend.

Also, if you would like I have a picture of my power supply and transmitter that I could email you (I sound like a new father). It's in bitmap format so you could use it as your wall paper, I bet you can't wait.

Thanks for your time and hope so here some of you Friday.

de KI00T, Brad

Date: Tue, 27 Mar 2001 11:17:50 -0700
From: "T.W." <wb5qyt@abq.com>
To: <qrp-1@lehigh.edu>
Subject: [95071] tn timer info S-120
Message-ID: <MABBIKAEJKMHLIDDGMCKMEENCGAA.wb5qyt@abq.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,

Thanks to all for the info on the web site for manual downloads. You guys are great!

72, Tom WB5QYT....."Have spud will travel!"

Date: Tue, 27 Mar 2001 11:21:07 -0700
From: "T.W." <wb5qyt@abq.com>
To: <qrp-1@lehigh.edu>
Subject: [95072] 14avq manual found
Message-ID: <MABBIKAEJKMHLIDDGMCKCEFACGAA.wb5qyt@abq.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,

Who needed the manual for the above? Found it and will ship free...just need the address..

72, Tom WB5QYT....."Have spud will travel!"

Date: Tue, 27 Mar 2001 18:43:58
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [95073] Re: OT: Learning DSP

Message-ID: <F301dRGy9tCx1Dy3riC00004cac@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Mark KA6WKE wrote:

>My latest foray into hamdom is learning DSP. In general
>terms in the RF arena for IF and audio areas. I started
>collecting and reading various articles, etc but am still
>confused on a good DSP evaluation system to learn on.
>Anyone have any pointers or experiences they are willing
>to share??

Whatever you can get. Whatever you can afford. The Analog
Devices ADSP-2181 board is a steal. Buy one!

>FWIW, I do have a small background in assembly and C
>programming on Intel based CPUs.

A Pentium MMX with a full-duplex sound card (or two
sound cards, if you can get the DMAs and IRQs to behave)
will do lots of interesting DSP stuff. A P233MMX has
more MIPS and more megaFLOPs than many "real" DSP chips.
Such a computer is an entry-level doorstop nowadays.
Load a real OS on it and have fun - Windoze is more
trouble than it's worth for such applications, and the
development tools are expensive.

>Where I can already tell I'm short in is the math - but
>is that a major requirement and will it hinder learning??

Yes, on both counts. Without the mathematics you'll have
difficulty even reading any of the textbooks - even one
as elementary as Ifeachor & Jervis. You won't be able to
do any design work.

Laura Halliday VE7LDH "Que les nuages soient notre
Grid: CN89mg pied a terre..."
ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Tue, 27 Mar 2001 13:16:59 -0500
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp-1@lehigh.edu>

Subject: [95074] WPX test!!!
Message-ID: <000001c0b6f0\$2239e640\$25191842@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All !!!

Strange weekend !!! ..worked 220 on 10 meters !!
Entered single band and worked with a Ten Tec Argo 509 to a Cushcraft AR 10
Ringo up 25 ft.
Power out was 2 watts peak !!! Had a ball !!!

73s
George Osier , N2JNZ / QRP

Date: Tue, 27 Mar 2001 19:01:56
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: glowbugs@piobaire.mines.uidaho.edu, qrp-l@lehigh.edu
Subject: [95075] More HB Pics
Message-ID: <F42vKRNZSPGNkY5Tetp000115b4@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I have uploaded a few more photos of my projects and junk.

The link below shows a photo of my homebrewed grid dip oscillator and coil set. This gdo uses a 5719 subminiature triode, a meter scrapped out of a tape deck, and is powered by a transformer salvaged from a dot matrix printer (supplies both heater and plate voltages). The coil forms are made of acrylic tubing with a PC board baseplate. The pins are made of 3/32" OD brass tubing and arranged to fit an octal socket. The four coils cover the entire HF spectrum.

<http://www.geocities.com/alibhernlem/Radio/gdo1.jpg>

Here is a link to a pdf of the dial face for the grid dip meter. The dial was calibrated against a digital receiver.

<http://www.geocities.com/alibhernlem/Radio/gdo.pdf>

Here is a shot of my bench, showing clockwise from lower left, a homebrewed +/- 12V, 1A power supply (there is a 250W

smorgasbord linear supply under the bench not shown), a homebrewed RF generator with sweep (using a MAX038 chip), a homebrewed discrete logic 8 digit frequency counter, a tone transmitter (not HB), a 7613 Tektronix oscilloscope, and a homebrewed Wien bridge audio signal generator.

<http://www.geocities.com/alibhernlem/Radio/bench1.jpg>

These are some "breadboard" tube sockets that I use for glowbug circuit testing. Also shown is my key.

<http://www.geocities.com/alibhernlem/Radio/sock.jpg>

Finally, I have added to the following page three photos of the microcontroller frequency counter that I built last year.

<http://www.geocities.com/alibhernlem/Radio/freq.html>

Brad

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Tue, 27 Mar 2001 15:03:25 -0500
From: "Brian" <bmurrey@amexol.net>
To: "pigs" <fpqrp-1@mpna.com>, "QRP-L" <qrp-1@lehigh.edu>
Subject: [95076] Manhattan punch!!
Message-ID: <002e01c0b6f8\$fc1dcd10\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

<http://www.harborfreight.com/cpi/taf/Displayitem.taf?itemnumber=44060&cid=633894>

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=====
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SOC #400 AND FLYING PIGS QRP #-57
=====

Date: Tue, 27 Mar 2001 12:08:32 -0800
From: "Phinizy, William" <wphinizy@filenet.com>
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>
Subject: [95077] Question: Part Substitution in Iowa 10 QRP Rig
Message-ID: <C3AF5E329E21D2119C4C00805F6FF58F04B76D2C@hq-expo2.filenet.com>

Thanks to Paul, NA5N, and his splendid solar activity reports and stupendous layouts of N0MF's Iowa 10 QRP rig, several of us want to try our hands at the before it is reduced to a novelty item of little use. The project looks very interesting -- especially with Chuck Adams' and Jim Kortge's build-off on the NorCal site.

I am wondering about the Linear Technology LT1252 Op Amp, however. Is this a fairly common IC? I wonder how pricey it is? Also, would there be a more reasonably available substitute -- like a 741 or LM301 that I have a mountain of?

..thanks in advance.

W. H. Phinizy, K6WHP
Principal Engineer
FileNET Corporation

Date: Tue, 27 Mar 2001 15:19:28 -0500
From: paul taylor <ptay1@bestweb.net>
To: qpr arci <qrp-1@Lehigh.EDU>
Subject: [95078] test disregard
Message-ID: <3AC0F5D0.F76A8DF6@bestweb.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

testing linux disregard

Date: Tue, 27 Mar 2001 15:24:18 -0500
From: "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
To: "'walt_amos@juno.com'" <walt_amos@juno.com>, Low Power Amateur Radio
Discussion <qrp-l@Lehigh.EDU>
Subject: [95079] RE: and more information ...DO NOT!!!! Recharging Alkaline
Message-ID: <078F21595FA7D411B87B00805FA728E64A4668@atlexc02ntms.hboc.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Ladies and Gents, one and all...

IF you have not had the experience of an ALKALINE battery exploding because of recharging, you are in for a "REAL CHARGE!!".. One time for me, 20 years ago, was more than enough. Besides the damage to everything else in the room being covered with a highly caustic liquid that ate everything it contacted, I could not get to a sink fast enough to get the rapidly burning liquid off of my body!! And believe me I mean burning. I would have rather put my hands and arms in a lye solution in a bucket! This stuff in the batteries is bad, real bad.

If you really need to know what is inside, you can do the following with REAL CAUTION!! Take a "D" cell alkaline outside the house. Have a supply of water near you in a bucket. Carefully remove the outer covering of the battery. Inside you will find a metal cylinder with a plastic seal on one end with a Zinc roofing nail inserted into it. You can remove the roofing nail and get covered rapidly with the solution! Go to the water and vinegar to neutralize the liquid in a real hurry. Now you know what I mean. I DO NOT RECOMMEND ANYONE DOING THIS!!!!!! It is extremely dangerous! The results are not good. The solution inside seems to be under pressure as I found out the hard way!

The label on the battery says not to recharge and they mean it. One experience will truly make a believer out of you. It is just not worth the chance.

Jerry
W3CDE

-----Original Message-----

From: Walter D Amos [mailto:walt_amos@juno.com]
Sent: Friday, March 23, 2001 7:52 AM
To: Low Power Amateur Radio Discussion
Subject: and more useless informationFw: Re: Battery
Suggestions: Recharging Alkalines

Folks:

I have a couple of these chargers, pieces of junk but they work! Mine must have came from KMART or RATSHACK years ago. Basically all they are is a DIODE in series with a lamp to limit the current so they wont catch on FIRE if you put dead short batteries in them. They charge old carbon zinc sell and just about anything else. Current is around 15 or 20 MA. on a dead short. It is pulsed DC as no capacitor across the DIODE. Dan is sure right, they will look ok after many charges and promptly leak all over inside you fine equipment. I date the cell when they come in from the store and make marks for each charge and 5 or 10 charges toss the cells, they are usually a few years old by then anyway. I have saved a lot of pocket change over the years but also had a couple of nasty messes to clean up. They seem to come back better if you do not totally discharge carbon zinc or alkalines. Nicads and there associate chargers are a much better way to go but cost a few more coins to begin with and you have the 1.2 volt problem in equipment that wants 1.5 volts per cell.

Another interesting point, most D Nicads are really C cells inside, have the same current rating so you know they are cheating you. Ratshack does sell a real D cell nicad but it costs an arm and a leg! Heavy too!

No hole to crawl into here so will just slink off to the corner of the room and face the wall :-)

Walt K8CV

----- Forwarded message -----

From: NOBN@aol.com

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Date: Thu, 22 Mar 2001 21:25:45 EST

Subject: Re: Battery Suggestions: Recharging Alkalines

Message-ID: <2b.12cc7383.27ec0e29@aol.com>

Friends,

With respect to Rick's comment about the waste of "throw-away" alkalines, I

have a "smart charger" from one of the major solar alternative energy products catalogs (don't recall which one and can't find it) which sells a

charger which will charge 4 alkalines, NiCads and NiMh batteries in any combination from AAA to D cells. It was made by Innovations International

Limited in England and cost about \$50. The model name is "Battery

Manager
Ultra."

It has been worth its value many times over. The only problem is that eventually the alkalines fail and it left in equipment will leak. The charger generally, though, tells you when the battery isn't accepting a charge and should be discarded.

Daniel n0bn

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<http://dl.www.juno.com/get/tagj>.

Date: Tue, 27 Mar 2001 20:26:30 +0000

From: alan.kaul@att.net

To: mneverdosky@earthlink.net

Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [95080] Re: Airport Security and Ham Gear

Message-ID:

<20010327202631.QWAX29681.mtiwmhc24.worldnet.att.net@webmail.worldnet.att.net>

I travel a lot. Often to dicey places. I've carried full sized transceivers and small QRP rigs. Here are a few observations:

1-travelling with NO RADIOS I would always get pulled out of line when going thru Beirut Airport in 1985 (several trips) to be body searched!

2-I often carried LEAD FILM BAGS in my hand carry -- but only at London Heagthrow and Hong Kong's old airport were the lead bags ever opened and the contents searched by hand.

3-The old Hong Kong Airport X-Ray machine used to have a sign on it saying it was so strong it would destroy film---that cameras and film should be hand inspected.

4-Upon arriving in Damascus, Syria, (several times in 1986-87), airport officials demanded that all batteries be removed from electronic devices and discarded at the airport. Outbound passeengers also lost their batteries.

5-Iraqi Airlines (in 1986) banned ALL hand carry luggage--everything had to be checked, no exceptions!

6-Several foreign airlines in the 80's used to require batteries be removed and discarded for all electronic devices before boarding their planes.

7-Qantas Airlines (flying LAX-Sydney during the 2000 Olympics) made passengers on my flight put screw-drivers, knives (no matter what blade length) and other tools in checked-baggage before boarding, or surrender them to be stored inflight and be returned in Sydney.

8-The only airport I ever had to display all my radio gear, including antenna wires, tool kit, CW key, etc., was Portland, Oregon, when I tried to check in for an Alaska-bound flight and had a complete QRP station in a briefcase.

9-The only airport where I ever had radio gear seized was in NW Jamaica (the name escapes me). I did not have a Jamaican license when I arrived. My MFJ tuner was seized (the customs officer didn't think the 20M QRP rig looked like a radio). It took a full day to 1)take a bus to Kingston, 2) get a license, 3) fly back to the airport---it was a small plane and the pilot let me sit in the cockpit, 4) get the radio out of customs, 5) catch a minibus back to my hotel at Ocho Rios (where I worked about 30 Q's and five countries running 250-milliwatts).

10-can we please let this thread die?

--

Alan Kaul W6RCL e-mail:w6rcl@amsat.org
<http://worldnet.att.net/~alan.kaul/index.html>

Date: Tue, 27 Mar 2001 15:36:16 -0500
From: "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
To: "'myetsko@insydesw.com'" <myetsko@insydesw.com>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [95081] RE: Battery Suggestions: Recharging Alkaline
Message-ID: <078F21595FA7D411B87B00805FA728E64A4669@atlexc02ntms.hboc.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Mike,

The Renewal system is NOT the same as the standard alkaline battery system. It uses a battery similar to what was used in miners head lamps for years. The Renewal charger is CPU controlled and uses a system of pulse charging similar to the CRISTY system for nicad battery charge and recovery. It charges then burps the battery and then measures the terminal voltage with a specific load across it. It continues this process till the battery terminal voltage holds with a specific load. It then goes into a sleep mode and checks the terminal voltage at intervals. If it sees the terminal voltage drop below specifications, it will pulse it to bring it up to full terminal voltage. These batteries have an AH rating of two times the standard alkaline cell. Which in many cases, makes them the same price or less if you find them on sale. Their useful life is considered when they have the same AH rating as a normal alkaline i.e. 50% of original capacity, or when the end user can no longer get the needed service time from them.

I have used these since they were first introduced a few years back.

Jerry
W3CDE

-----Original Message-----

From: Mike Yetsko [mailto:myetsko@insydesw.com]
Sent: Friday, March 23, 2001 6:21 AM
To: Low Power Amateur Radio Discussion
Subject: Re: Battery Suggestions: Recharging Alkalines

> It has been worth its value many times over. The only
> problem is that eventually the alkalines fail and it left in
> equipment will leak. .
>
> Daniel n0bn

Well, this is to be expected...

First off, other than the Renewal charger (which does a tricky contact thingie for AA) I know of only ONE other charger that uses what would be called a 'correct' procedure for charging alkalines. I was told at one time that the majority of 'alkaline chargers' just send a current through or pulse to

try to break down gas in alkalines.

And even with the 'correct' method (as in a Renewal charger) the main difference between generic alkalines and Renewals is that the Renewal is BUILT to handle the gas pressures that are generated by the recharging method. If you put standard alkalines into a Renewal charger (with mods as necessary) they should recharge, but almost all of them will leak.

Mike

Date: Tue, 27 Mar 2001 12:40:16 -0800
From: "Neil" <neil@aade.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [95082] manhattan style
Message-ID: <003101c0b6fe\$21cff880\$5a330918@fedwy1.wa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Can anyone point me to any web sites with pictures or instructions of/for Manhattan style construction?

Neil
<http://www.aade.com>
<mailto:neil@aade.com>
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

Date: Tue, 27 Mar 2001 20:46:58 +0100
From: "Chuck Adams, K7Q0" <k7qo@earthlink.net>
To: qrp-l@Lehigh.EDU
Subject: [95083] [TMP5/MH101] Down to the wire for Atlanticon
Message-ID: <5.0.2.1.0.20010327201803.00a17380@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

I started on January 12th, 2001 with an attempt to get all 50 states by November of this year. I'm hoping that it won't take that long. I am only 3 short of the goal. In fact, some of the more difficult states that I have worked in the last few weeks have already gotten me QSL cards as I was just as rare as they were. :-) And if you think about it the principle of reciprocity may work here also. If the rest of us have difficulty working them then in the same manner they are having trouble working us. :-) I was the first station in AZ for a VT, RI, and another ME. Go figure. I am about to hit the 400 Q mark. That's a lot of paper as I write each character from the other station still..... And my QSL bill hit \$100 for postage. This is an expensive exercise. :-) \$55 rig, \$10 battery, \$20 antenna, \$XXX,XXX for the land ;-), \$50 for the keyer, \$100 for the paddle, ... This hobby is expensive. ;-)

So hopefully I can get one more in the next three nights. I just want to remind everyone again that you need to get on the air. Go to

<http://www.dxlc.com/solar/>

Today the Solar Flux is 263.7 on the a.m. update which is near the record for this cycle. A-index is at 6, so good conditions should prevail. And the sunspot number is over 340. The SF and SN numbers are terrific numbers to have and we don't see but a few times every 10-12 years so enjoy them while you can.

Last night late I caught an EA8 in the Canary Islands and he held me on frequency for several minutes while holding up a pileup 'cuz he wanted my QSL and info since I was QRP. These DX stations are true fellow hams and seem to give us 'little guys' a lot of attention when they do catch us.

An update on the MH101 project. I have the SWL-30+ schematic and parts list on the web (thanks to Dave Benson, NN1G, for permission). I mentioned that I'd do the SWL-30. Sorry, changed my mind. What I am going to do is take the SWL-30+ and do some mods, some related to the SWL-30, i.e. no IF cans. Another is to add an IF amp and we'll talk about those that are interested in adding the freq mite from SWL and a PIC/TIC keyer to reduce the external items need to get the rig on the air and know where we are. I think the changes to the SWL-30 will make it more like the SWL-30+, so I'll just work on the plus and modify it. If anyone really has their mind set on the SWL-30, I can easily go back to it, but that is up to you.

I want to, in the process of doing this, educate some people on what IF transformers do and transformers in general. So if parts become rare and disappear

we can still get by and in some cases do a better job. For the MH101 crew. Go to

<http://www.mouser.com/specsheets/114211.pdf>

and printoff the Mouser spec sheet for the IF cans. Look at the 42IF123 specs (next to last line of data). Figure the response frequency, etc. from the L and C values. Look at the turns ratio. What is the voltage in vs. voltage out ratio? What toroid core and what turns ratio would you use to replace this puppy? Can you? And it will take an external cap also.

So stand by for more info after Atlanticon. I'm packing as we speak and the suitcase is looking smaller every minute. And I still haven't decided if I need sweaters and coat. It's summer time here almost. :-)

FYI

Chuck Adams, K7QO CP-60
Prescott, AZ k7qo@earthlink.net <http://www.qsl.net/k7qo> <http://moon.pr.erau.edu/~adamsc>

TMPS-2001 Mar 27, 2001 Q's = 398 States = 47 Counties = 316 DXCC = 13
SWL-30 with CMOS 3 keyer and HB Iambic Paddle or Code Warrior 0.500W and vee-beam

States Needed AK DE VA

DXCC --- K XE VE KH6 V73 HI3 FM5 OH3 C6 ZL1 C08 ZS6 EA8

Date: Tue, 27 Mar 2001 12:55:01 -0800
From: Stephen M Smith <sigcom@juno.com>
To: qrp-l@Lehigh.EDU
Subject: [95084] Re: Manhattan punch!!
Message-ID: <20010327.125501.-487131.0.sigcom@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Group,

Boys and girls, this is a real deal. The cheapest I've seen this punch in the past was \$12.95 (that's what I paid) and you had to get it off the shelf at one of their retail stores. Now you can get it mail order and

for ten bucks to boot. If you've been sitting on the fence thinking about buying this tool, now's the time to act.

Usual disclaimer applies.

(OT: Anybody on here that has worked at Rye Canyon that I could correspond with?)

73.....Steve 'The Scrounger' Smith
WB6TNL Oxnard, CA USA
"snort rosin"

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Date: Tue, 27 Mar 2001 14:12:52 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: "Phinizy, William" <wphinizy@filenet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [95085] Re: Question: Part Substitution in Iowa 10 QRP Rig
Message-ID: <Pine.SUN.4.10.10103271354290.12016-1000000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 27 Mar 2001, Phinizy, William wrote:

> Thanks to Paul, NA5N, and his splendid solar activity reports and stupendous
> layouts of N0MF's Iowa 10 QRP rig, several of us want to try our hands at
> the before it is reduced to a novelty item of little use.

It's inspired me to work some 10M lately before it's too late also. 10M will be around for awhile yet, another year or so, but it will be the first to go as the solar flux drops below 150 on the peaks.

> The project looks
> very interesting -- especially with Chuck Adams' and Jim Kortge's build-off
> on the NorCal site.

Mike did a good job designing the rig. I still have his original that I used for trying out the new T-R switch, open air coils in the transmit LPF filter, etc. The better T-R switch (that is, better isolation), eliminates the need for the duo-FET mute switch on the product detector, making it a bit simpler there. These changes, plus those of Jim's and Chuck are shown on the latest schematic on Chuck Adams website (linked

from the NorCal site easily).

> I am wondering about the Linear Technology LT1252 Op Amp, however. Is this a
> fairly common IC? I wonder how pricey it is? Also, would there be a more
> reasonably available substitute -- like a 741 or LM301 that I have a
> mountain of?

The LT1252 op amp is available from DigiKey in the \$3.50-\$4.00 range.
It is a wide-band 100MHz video amplifier, so that 28MHz is well within
the gain bandwidth.

An LM741 WILL NOT WORK, since most general purpose op amps have a power
gain bandwidth of a few hundred KHz to 1MHz. Specifically, the 741 op
amp hits zero gain around 1.2MHz (varies from unit to unit).

For substitutes, you could fairly easily use the MC1350 if you have one
of those on hand (a 90MHz device), since it's also a high input
impedance device. Or you could also use a MiniCircuits MMIC amplifier,
such as the MAR-1, ERA-1, etc. if you have one of those. However, they
are 50-ohm devices, so the input and output networks would have to be
redone to match the 50-ohm input and output of the MMIC amplifier.

These are all in the same \$4 each range, so if you need to purchase
something, I'd go with the LT1252, a proven circuit first used by Wayne
Burdick in his SST design.

Have fun and melt solder!

72, Paul NA5N

Date: Tue, 27 Mar 2001 13:24:07 -0800
From: Mike Gipe <mgipe@reliablemeters.com>
To: "QRP-L list (E-mail)" <qrp-l@Lehigh.edu>
Subject: [95086] Fox: Announcing the XTREME FOXHUNT!
Message-ID: <F988E2FF74F4D111A61F00A0C949D7A964B454@mission>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Gang --

What a GREAT foxhunt season we had this winter! Records were broken all
over the place. Even the last place score would have secured a first prize
just a few years ago. Amazing! Congratulations foxes and hounds!

After all that good work, we need a PARTY! So here's the deal:

There will be a big blow-out "XTREME FOXHUNT" on April 3 (Tuesday) from 0200Z to 0400Z (4 April UTC). Nearly all of the foxes from the recent hunt will be on the air at the same time. They will set up on frequencies of their choice on the 40 M CW band between 7.030 and 7.055 and call CQ fox. The QRP-L hounds will bounce from fox to fox to collect as many pelts as they can in two hours. (Please be sensitive to the other users of the band and avoid causing interference.)

Rules will be substantially the same as the regular hunt. We don't expect that split operation will be as important, but it will be up to the foxes to determine the best way to work efficiently and control the hounds.

Here is the list of foxes to look for:

K0EVZ
K2Q0
K50I
N1FN
N2WW
W0CQC
N5IB
N6WG
N5TW
K4FB
W8RU
N7CQR
K0PC
N0AR
N8VAR
N0UR
NW7DX
KV2X
VE5RC

So mark your calendars for the XTREME FOXHUNT next Tuesday, and get another fix of fox before terminal withdrawal sets in!

Good luck from...

Your Friendly Foxhunt Coordinating Committee

Date: Tue, 27 Mar 2001 21:47:39 -0000
From: "Tom Dufresne" <tdufres@hotmail.com>

To: mgipe@reliablemeters.com
Cc: QRP-L@lehigh.edu
Subject: [95087] Re: Fox: Announcing the XTREME FOXHUNT!
Message-ID: <F79BpDgnuwizfZxuB6P000159b6@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Mike:

Sounds like a real trip! How about some of them thar foxii opp'ing on the nov-ice band for us newbies, huh?

Just a suggestion...

KC0GXX

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Tue, 27 Mar 2001 17:02:46 -0500
From: "Ham" <k1vp@grizzly.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [95088] Re: Fox: Announcing the XTREME FOXHUNT!
Message-ID: <00c401c0b709\$a97241c0\$0e01a8c0@office.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: Tom Dufresne <tdufres@hotmail.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Tuesday, March 27, 2001 4:47 PM
Subject: Re: Fox: Announcing the XTREME FOXHUNT!

> Mike:

> Sounds like a real trip! How about some of them thar foxii opp'ing on the
> nov-ice band for us newbies, huh?

> Just a suggestion...

How about allowing some OPs who have never been a Fox and may not feel ready to be a Fox to be Foxii in training by operating in the Novice band where their modest skills can be matched with slower CW speeds as well?

Ed Lawson
K1VP

Date: Tue, 27 Mar 2001 22:41:10
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [95089] Harbor Freight free shipping coupon
Message-ID: <F15JYEbjFpuhIkvuxQy0000bc1c@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Just got a new catalog from them today, with a coupon on the back for free shipping until July 1,2001. Can be used on phone orders it says. The coupon number is FS 812-332-518 and I suspect it is the same number on all the catalogs.

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Tue, 27 Mar 2001 17:57:25 -0500
From: "David Porter" <aa3ur@home.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95090] Re: Harbor Freight free shipping coupon
Message-ID: <001301c0b711\$4ad56540\$926e0941@jamison1.pa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

It also works on the web. Hit the apply coupon button during checkout. You will only be able to use the free shipping once however, so if you are going to order something heavy, you might want to save it for that order.

David Porter
aa3ur@home.com
AA3UR

----- Original Message -----

From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, March 27, 2001 10:41 PM
Subject: Harbor Freight free shipping coupon

> Just got a new catalog from them today, with a coupon on the back for free
> shipping until July 1,2001. Can be used on phone orders it says. The

coupon

> number is FS 812-332-518 and I suspect it is the same number on all the
> catalogs.

>

>

> -----
> Get your FREE download of MSN Explorer at <http://explorer.msn.com>

>

Date: Tue, 27 Mar 2001 16:58:32 -0600

From: "Jay Bromley" <w5jay@alltel.net>

To: <DDORN@CWIS.NET>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [95091] Re: MOBILE ANTENNA QUESTION:LONG

Message-ID: <00d001c0b711\$a8eff8c0\$2a9b66a6@alltel.net>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Don the answer is yes!

I have seen this quite a bit out west, mostly in the Fort Tuthill Scorpion
campground area. If I remember correctly I saw the other Jay, WA5WHN,
Miller doing this. Using a antenna like Vern Wright's PW-1 on a mag mount
or something similar definitely needs some wire attached to the base of the
antenna the lower in frequency you go. I think it would even help out a
little with an antenna mounted to the body and fame, but not while driving,
<g>. I will explain more later (see below).

I was playing around a lot with a PW-1 on a mag mount and when I tried to
get below 20m grounding became real important. Vern's antennas come with a
radial kit that works very well with a mag or tripod mount. With the radial
kit clipped on the PW-1 the mag-mount worked very well on the Tahoe.
Without the radial kit installed on the PW-1 40 meters was very unstable and
hard to tune. When I use the PW-1 coil in place of the 3 inch Texas Bug
Catcher coil the radials made a difference, but not as much. The mount for
the Bug Catcher is grounded very well so the PW-1 coil tune up very good and
was stable, just like the 3 or 4 inch Bug Catcher coil.

My main HF mobile mount is dead center on the off the back bumper and for a
long time I have noticed that the signals are usually better off the front
of the vehicle, sometimes many dB on both transmit and receive.

Well now that I gave all this fine information that is nothing more than
Voodoo magic, right. A few months ago a friend of mine had a
defibulator/pace-maker installed in his chest and he was very concerned

about what RF might do to the defib unit and him. We have been trying to convert him to QRP anyway, but he is a QRO DXer and old habits are hard to break. At work we have some RF instruments that check for power density safety. After checking his shack and declaring it safe I went out to his mobile. All he has was a 2m rig installed and the antenna is mounted on the drivers side near the hood. Where would you think most of the radiation was, you guess it over the body mass of the vehicle and because the FM antenna was on the passenger side there was a side lobe right were the passenger seat was. As long as the occupants stayed in their seats and not move forward everything passed, but just barely.

All this was a little funny to me that a 50 watt 2m rig had more radiation than a high power HF station with a beam aimed over the shack. Now I not trying to make a safety issue out of all this, but trying to show that radials could be a good asset for mobile operation during a field contests. I hope that a RF safety tread won't be started on QRP-L because of this post!

When I got home I got to wondering about my own setup so I started playing again with the power density meter that my boss loan me to help a out fellow ham. My results were very similar to what I had found out earlier except my friend didn't have a HF mobile antenna on his vehicle. So on goes the Bug Catcher coil and then I conned Kathy, WQ5T, into keying the mic for me. It was getting dark now and all the neighbors are outside or out for their evening walk looking at my 12 ft. (Chuck how much is this in metric, grin) plus antenna on the Tahoe with me walking around in a circles with weird probes, antennas, and service monitors. What floored me was what I had always known by operating the mobile station, that the maximum signal was off the front of the vehicle. Using the safety probe I could get about six feet in to the back before measuring any power and 3 ft. to the antenna it would be at 100% with 100 watts going to the antenna. However moving the probe to the front of the vehicle I still had OVER 50% power density. I quickly grabbed Vern's PW-1 radial kit and clipped it on the base of the antenna mount and spread them out towards the back. I measured the pattern again and now I could go to the back side 12 feet away and still get 50% power density just like the front of the vehicle.

Anyway the usual declaimer, your mileage may vary, and remember I was using this safety meter as a glorified field strength meter. Again this post was to show how radials and metal in general affect the pattern of a antenna and not meant to be post about RF safety. Have fun-----and

73 de w5jay..

P.S. Hey Vern, did I do a good enough job to get a Super Antenna, grin??????

> Here is something that my pea sized brain has been wondering about. If a
> mobile antenna is used for portable operation with the vehicle parked,
> such as in one of the qrp field contests, would the antenna be more
> effective if a few radials were used strung out from the vehicle body?
> All the metal of the vehicle would probably make it impossible to tune
> the radials I suppose. Has anybody tried this?
>
> Don K5AAR
> Lake Eufaula, Ok
>

Date: Tue, 27 Mar 2001 18:08:13 -0500
From: "David Porter" <aa3ur@home.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [95092] Re: Harbor Freight free shipping coupon
Message-ID: <002301c0b712\$cd67cc40\$926e0941@jamison1.pa.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Funny when I ordered, I didn't notice the \$4.95 "Handling Charge" that they
add. That makes it \$14.94. not \$9.99 even with the "free shipping".

----- Original Message -----
From: "David Porter" <aa3ur@home.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, March 27, 2001 5:57 PM
Subject: Re: Harbor Freight free shipping coupon

> It also works on the web. Hit the apply coupon button during checkout.
You
> will only be able to use the free shipping once however, so if you are
going
> to order something heavy, you might want to save it for that order.
>
> David Porter
> aa3ur@home.com
> AA3UR
> ----- Original Message -----
> From: "Mike WA8BXN" <hubby2k@hotmail.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> Sent: Tuesday, March 27, 2001 10:41 PM
> Subject: Harbor Freight free shipping coupon
>
>
> > Just got a new catalog from them today, with a coupon on the back for
free
> > shipping until July 1,2001. Can be used on phone orders it says. The
> coupon
> > number is FS 812-332-518 and I suspect it is the same number on all the
> > catalogs.
> >
> > -----
> > Get your FREE download of MSN Explorer at <http://explorer.msn.com>
> >
>

Date: Tue, 27 Mar 2001 17:32:26 -0600
From: Dave Sjolín <sjolin@swbell.net>
To: tdufres@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, mgipe@reliablemeters.com
Subject: [95093] Re: Fox: Announcing the XTREME FOXHUNT!
Message-ID: <3AC1230A.590E25EB@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Tom Dufresne wrote:

>
> Mike:
> Sounds like a real trip! How about some of them thar foxii opp'ing on the
> nov-ice band for us newbies, huh?
> Just a suggestion...

Any thought to expanding this to Cub Foxes so we can provide pelts and
entertainment up in the Novice band for newbies? If it adds to the work,
I would be happy to coordinate that end of it.

73 de Dave, N0IT

Date: Tue, 27 Mar 2001 16:49:44 -0700
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@lehigh.edu

Subject: [95094] FOX: "Novice Foxes" ?
Message-ID: <3AC0C4A8.9497.A7276A@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Watch this space-- there is a rumor that the Cub Foxes are going to be on at
the same time with their own Mildly Extreme Foxhunt.

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

End of QRP-L Digest 2140

